CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, January 10, 1907.

CONTENTS

CONSTRUCTION NEWS:
Plans and Specifications on File 9
List of Contracts Pending 9
Railways 10
Electric Railways 10
Light and Power Plants 11
Bridges 11
Buildings 11
Water Supply and Irrigation 12
Sewerage 13
Streets and Roads 13
Manufacturing Plants 13
Miscellaneous Contracts 14
Contract Prices 15
U. S. Possessions and Cuba 15
Mexico 15
READERS' WANTS 14
PROPOSALS 15-16

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.) and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue
Jan.				
12	Dredges, Panama	S. & B. S.		12-27
15	Water-works	Pineville, La	S. & B. S.	1- 3
*15	Sewers	Bisbee, Ariz	P., S. & B. S.	1-10
*15	Water tunnel & inlet	Gary, Ind	P., S. & B. S.	1-10
19	Wharf	New Orleans, La	S	12-27
*23	Sewer system	Orangeburg, S. C	S. & B. S.	1-17
*24	Traveling crane	W. Point, N.Y	S. & B. S.	1-10
26	Crematory	Pensacola, Fla	S. & B. S.	1- 3
Feb.				
1	Ordnance	Dover, N. J	P., S. & B. S.	1-10
*4	Sewers	Cape Girardeau, Mo	S. & B. S.	1- 3
9	Generator set	Philadelphia, Pa	S	1-10
Mar.				
*1	Pipe, etc.	Winnipeg, Man	S. & B. S.	1- 3
18	Sewers	Burlington, Iowa	P., S. & B. S.	1-10

*Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

Bids close.	Work.	Place.	On file.	See issue
Jan. 10	Electric equipment	Pasadena, Cal		Dec. 6
Jan. 14	Electrical work	New York, N. Y		Jan. 10
Jan. 14	Generating plant	Winnipeg, Man		Jan. 3
	Advertised, Eng. News, Jan. 3.			
Jan. 15	Power-house	Nanticoke, Pa		Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.			
Jan. 15	Fixtures	Fairmont, Minn		Jan. 10
Jan. 18	Electric light plant	Panama		Jan. 10
Jan. 30	Power building	Washington, D. C		Jan. 3
	Advertised, Eng. News, Jan. 3 to 24.			
Feb. 1	Gas works	Richmond, Va		Dec. 6
	Advertised, Eng. News, Dec. 6.			
Mar. 7	Lighting	Natchez, Miss		Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.			

BRIDGES.

Jan. 12	Bridges	Wichita, Kan		Dec. 27
Jan. 15	Bridges	Colfax, Wash		Dec. 27
Jan. 16	Drawbridge	Cambridge, Mass		Dec. 27
	Advertised, Eng. News, Dec. 27.			
Jan. 16	Bridges	Nebraska City, Neb		Jan. 3
Jan. 16	Bridge	Memphis, Tenn		Dec. 27
Jan. 21	Steel bridge	Bluevale, Ont		Jan. 10
Jan. 25	Bridge	Cincinnati, Ohio		Jan. 10
Jan. 31	Iron bridge	Hallock, Minn		Jan. 10
Feb. 5	Bridges	Salinas, Cal		Jan. 3
Feb. 8	Bridges	Hammond, Ind		Jan. 3
Feb. 14	Steel bridge	Cullman, Ala		Jan. 10
	Advertised, Eng. News, Jan. 10.			

BUILDINGS.

Jan. 10	Work shop	New York, N. Y		Jan. 3
Jan. 10	Foundations	Atlanta, Ga		Dec. 13
Jan. 12	Marble work	Washington, D. C		Jan. 10
Jan. 14	Building	Cheyenne, Wyo		Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 10.			
Jan. 14	Bank, office building	Shreveport, La		Dec. 27
Jan. 15	Plans	Carthage, Ill		Dec. 27
Jan. 15	Post-office extension	Dallas, Tex		Dec. 13
	Advertised, Eng. News, Dec. 13 and 20.			
Jan. 15	Elevators	Washington, D. C		Jan. 3
	Advertised, Eng. News, Jan. 3 and 10.			
Jan. 16	Mess-hall	Talklai, Ariz		Dec. 20
Jan. 16	Station-house	New York, N. Y		Jan. 10
Jan. 23	Roof frame	Washington, D. C		Jan. 10
	Advertised, Eng. News, Jan. 10 and 17.			
Jan. 30	Post-office	Providence, R. I		Jan. 3
	Advertised, Eng. News, Jan. 3 and 10.			
Jan. 30	Marble work	Washington, D. C		Jan. 3
	Advertised, Eng. News, Jan. 3 to 24.			
Jan. 31	Heating	Crawfordville, Ind		Dec. 27
Feb. 1	Leprosy hospital	Hawaii		Dec. 13
	Advertised, Eng. News, Dec. 13 and 20.			
Feb. 1	Factory	Kokomo, Ind		Dec. 6
Feb. 4	Court-house	New Orleans, La		Dec. 27
Feb. 4	Storehouse	Ft. Monroe, Va		Jan. 10
	Advertised, Eng. News, Jan. 10 and 17.			
Feb. 8	Library	University, N. Dak		Nov. 15
Feb. 11	Barracks	Fort Hancock, N. J		Jan. 10
	Advertised, Eng. News, Jan. 10 to 31.			
Apr. 15	Plans	Ottawa, Ont		Dec. 20

WATER SUPPLY AND IRRIGATION.

Jan. 10	Water supply	Elkhart, Ind		Nov. 20
Jan. 10	Water mains	Tacoma, Wash		Jan. 10
Jan. 12	Pump-house addition	San Francisco, Cal		Jan. 10
Jan. 14	Boilers	Winnipeg, Man		Jan. 3
	Advertised, Eng. News, Jan. 3.			
Jan. 14	Pipe	Melrose, Mass		Jan. 3
	Advertised, Eng. News, Jan. 3.			
Jan. 15	Water mains	Cleveland Heights, Ohio		Jan. 3
Jan. 15	Water-works	Bisbee, Ariz		Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.			
Jan. 15	Pumps	Meadville, Pa		Dec. 20
Jan. 15	Water-works	Pineville, La		Dec. 20
Jan. 15	Water tunnel, etc.	Gary, Ind		Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 3.			
Jan. 15	Ditch	Tipton, Ind		Jan. 10
Jan. 16	Fire hydrants	Fort Flagler, Wash		Jan. 10
Jan. 16	Hydrants	New York, N. Y		Jan. 10
Jan. 18	Hydrants, c.-i. pipe, etc.	Juneau, Wis		Jan. 10
Jan. 18	Drilling well	Juneau, Wis		Jan. 10
Jan. 19	Pumping motor	Marshfield, Wis		Jan. 10
Jan. 22	Reservoir embankment	Granite, Colo		Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 3.			
Jan. 23	Pipe	New Orleans, La		Nov. 15
	Advertised, Eng. News, Nov. 15 to Jan. 17.			
Jan. 23	Water-works	Corning, N. Y		Jan. 3
	Advertised, Eng. News, Jan. 3 and 10.			
Jan. 24	Steel bars	Mitchell, Neb		Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.			
Jan. 28	Pumping engines	Muskegon, Mich		Dec. 20
Feb. 20	Water meters	Mexico		Jan. 10
Mar. 1	Pipe and specials	Winnipeg, Man		Dec. 20
	Advertised, Eng. News, Dec. 20 to Feb. 21.			
Mar. 5	Canals and ditches	Washington, D. C		Jan. 10
	Advertised, Eng. News, Jan. 10 to Feb. 14.			

SEWERAGE.

Jan. 10	Sewers	New York, N. Y		Jan. 3
Jan. 10	Sewer	Argenta, Ark		Jan. 3
Jan. 12	Sewers	Merchantville, N. J		Dec. 13
	Advertised, Eng. News, Dec. 13, 27 and Jan. 10.			
Jan. 14	Sewers	McKees Rocks, Pa		Jan. 10
Jan. 15	Sewers	Bisbee, Ariz		Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.			
Jan. 15	Disposal plant	Bisbee, Ariz		Dec. 13
	Advertised, Eng. News, Dec. 13 to Jan. 3.			
Jan. 15	Sewer	Richmond, Va		Jan. 10
	Advertised, Eng. News, Jan. 10.			
Jan. 21	Sewer	Des Moines, Iowa		Jan. 10
Jan. 21	Sewers	Wichita, Kan		Dec. 13
	Advertised, Eng. Neks, Dec. 13 to 27.			
Jan. 22	Sewers	Cedar Falls, Iowa		Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.			
Jan. 22	Sewers	Van Buren, Ark		Dec. 27
	Advertised, Eng. News, Dec. 27 and Jan. 3.			
Jan. 22	Sewer system	New York, N. Y		Jan. 10
	Advertised, Eng. News, Jan. 10 and 17.			
Jan. 23	Sewers	Orangeburg, S. C		Dec. 27
	Advertised, Eng. News, Dec. 27 to Jan. 17.			
Jan. 24	Sewers	Cincinnati, Ohio		Jan. 10
Jan. 25	Sewers	Cincinnati, Ohio		Jan. 10
Jan. 26	Drains	Greenfield, Ind		Jan. 3
Jan. 30	Sewers	Norristown, Pa		Jan. 10
Feb. 4	Sewer	Cape Girardeau, Mo		Dec. 20
	Advertised, Eng. News, Dec. 20 and 27.			
Mar. 18	Sewers	Burlington, Iowa		Dec. 27
	Advertised, Eng. News, Dec. 27.			

STREETS AND ROADS.

Jan. 10	Grading, etc.	New York, N. Y		Jan. 3
Jan. 10	Road	Smethport, Pa		Jan. 3
Jan. 10	Paving	Norfolk, Va		Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 3.			
Jan. 10	Macadam	Norfolk, Va		Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 3.			
Jan. 15	Macadam	Cleveland Heights, Ohio		Dec. 27
Jan. 15	Paving, etc.	Albany, N. Y		Jan. 3
Jan. 16	Paving	Cincinnati, Ohio		Dec. 27
Jan. 21	Grading	Montgomery, Ala		Jan. 10
Jan. 23	Cement work	Chicago, Ill		Jan. 10
Jan. 29	Paving	Bartlesville, Ind. T		Jan. 3
Feb. 5	Macadamizing	Somerville, N. J		Jan. 10
	Advertised, Eng. News, Jan. 10 to 24.			
Feb. 12	Macadam curb	Bogota, N. J		Jan. 10
	Advertised, Eng. News, Jan. 10 to 24.			
Mar. 1	Improving streets	Corvallis, Ore		Jan. 10

MISCELLANEOUS CONTRACTS.

Jan. 10	Cement	Detroit, Mich		Dec. 27
Jan. 10	Street railway franchise	Salem, Mass		Dec. 13
Jan. 11	Wharf work	Alaska		Dec. 27
Jan. 11	Street sprinkling	St. Louis, Mo		Jan. 3
Jan. 12	Dredges	Panama		Dec. 27
Jan. 12	Canal	Panama		Dec. 20
Jan. 14	Telephone supplies	Australia (Foreign)		Dec. 20
Jan. 14	Engineering supplies	Panama		Jan. 3
Jan. 14	Timber	Winona, Minn		Jan. 3
Jan. 15	Subway	Jacksonville, Fla		Jan. 3
Jan. 15	Crane runways	Callejo, Cal		Dec. 13
Jan. 15	Surveying, sea marsh	N. Orleans, La		Dec. 27
Jan. 15	Chemical cylinders	Little, Rock, Ark		Jan. 10
Jan. 15	Fire hose	Little Rock, Ark		Jan. 10
Jan. 15	Steam fire engine	Little Rock, Ark		Jan. 10
Jan. 15	Chemical engine	Little Rock, Ark		Jan. 10
Jan. 16	Ditches	Webster City, Iowa		Jan. 10
Jan. 17	Wharf	Key West, Fla		Dec. 6
	Advertised, Eng. News, Des. 6 to Jan. 3.			
Jan. 18	Engineering supplies	Panama		Jan. 10
Jan. 19	Wharf	New Orleans, La		Dec. 27
Jan. 21	Dump scows	Cleveland, Ohio		Dec. 20
	Advertised, Eng. News, Dec. 20 to Jan. 10.			
Jan. 21	Dredging	Sault Ste. Marie, Ont		Jan. 10
Jan. 22	Cable cars, engines	Washington, D. C		Jan. 3
Jan. 23	Telegraph, telephone supplies	New York		Jan. 10
Jan. 23	Bulkhead	New York, N. Y		Jan. 10
Jan. 24	Traveling crane	West Point, N. Y		Jan. 3
	Advertised, Eng. News, Jan. 3 to 17.			
Jan. 24	Jetty	New York, N. Y		Jan. 10
Jan. 25	Garbage disposal	St. Louis, Mo		Jan. 3
Jan. 26	Crematory	Pensacola, Fla		Jan. 3
Jan. 29	Piers	North Chicago, Ill		Dec. 13
Jan. 31	Bulkhead	New York, N. Y		Jan. 10
Feb. 1	Ordnance	Dover, N. J		Jan. 10
Feb. 4	Grading electric railway	Bisbee, Ariz		Dec. 27
Feb. 5	Naval supplies	Washington, D. C		Jan. 3
Feb. 5	Naval supplies	San Francisco, Cal		Jan. 3
Feb. 6	Tug	Washington, D. C		Jan. 10
Feb. 8	Spillway	San Francisco, Cal		Jan. 10
	Advertised, Eng. News, Jan. 10 to 31.			
Feb. 11	Railway	Spain (Foreign)		Dec. 6
Mar. 18	Tunnel	New Zealand (Foreign)		Sept. 13
	Advertised, Eng. News, Sept. 13 to Mar. 14.			
Apr. 12	Ditches	Brookings, S. Dak		Oct. 13

CIVIL SERVICE EXAMINATIONS.

Jan. 10	Inspector of Filters	New York, N. Y		Dec. 20
Jan. 16	Rodman	Boise, Idaho		Jan. 3
Jan. 16	Forest planting asst.	Washington, D. C		Jan. 3
Jan. 17	Marine Engineers	New York, N. Y		Jan. 3
Jan. 23	Engineer & Plumber	Fort Omaha, Neb		Jan. 3
Jan. 29	Computer	Washington, D. C		Jan. 3

REGARDING NEW PROJECTS

ENGINEERING NEWS desires to obtain the **earliest possible reliable information** concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

ADDRESS THE

Construction News Department

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ALASKA CENTRAL.—J. B. Cameron, Engr. of Construction, Seward, Alaska, states that the construction forces on the railroad are to be increased largely, according to the New York "Commercial," which quotes him as follows: "The Alaska Central has not made much headway in actual mileage in 1906, but it has made big headway in the amount of work done. We have finished the seven tunnels on miles 49 and 52, aggregating more than 4,100 ft. in length; have completed all of the grading and pile-driving out to mile 67; cleared all of the right-of-way to mile 105, and built a total of five miles of grading between miles 67 and 105. The railroad is now in operation through tunnel No. 1 to mile 50. In addition to the completed railroad we have ties on hand for 40 miles beyond the end of the track, and rails for 30. There is also bridge material on the ground for five bridges. Our bridge work has been retarded by inability to get fir stringers from the Puget Sound mills. All of the mills were so far ahead with orders that ours could not be filled until six weeks ago. The heaviest work on the Alaska Central is now finished with the boring of the seven tunnels, and next summer we shall make rapid headway. President Frost is anxious to get to the Matanuska coal fields, 185 miles north of Seward, next year if possible. At any rate we shall have the rails far enough in to handle all of the winter traffic from Fairbanks after this winter. The travel to the new Yentna district, one of the most promising in Alaska, near Mount McKinley, also is going to be heavy." A. C. Frost is Pres., 108 La Salle St., Chicago.

AMERICAN-MEXICAN.—It is stated that contracts have been given by this company to W. C. BRADBURY & CO., Railroad Bldg., Denver, Colo., for building this line from Phoenix, Ariz., via Tucson to Nalo, 250 miles. Lyman Bridges is Pres. and Ch. Engr., Tucson, Ariz.

ARIZONA MIDLAND.—Company will build a line to conect Florence with Superior, Ariz., 28 miles in length, we are officially advised. This information is given us in connection with the item in the issue of Nov. 22, under the title of "Lake Superior & Arizona Copper," to the effect that "the L. S. & A. C. Co., Florence, Ariz., will build a railroad from Florence to the Superior mines and will erect a 250-ton smelter at this place. The sum of $1,500,000 has been set aside by the board of directors of the company for the proposed improvements." J. D. Cuddehy is Pres., Calumet, Mich., and Alfred C. Sieboth is Ch. Engr., Florence, Ariz. Nothing is being done yet.

ARIZONA & CALIFORNIA (ATCHISON, TOPEKA & SANTA FE).—This company, which has extended its road in Arizona for about 30 miles, to mile post 80, has given contracts to the GRANT BROTHERS CONSTRUCTION CO., Los Angeles, Cal., for an extension from that point to mile post 107, 27 miles.

ATLANTA, BIRMINGHAM & ATLANTIC.—This company, which in 1906 built a line to La Grange, Ga., 60 miles, has given contracts to C. D. SMITH & CO., of Memphis, Tenn.; the CALLAHAN CONSTRUCTION CO., of Knoxville, Tenn., and WRIGHT, WILLIAMS & WADLEY, of Roanoke, Ala., for building from La Grange to Birmingham, Ala., 165 miles; also from Chalybeate to Atlanta, Ga., 77 miles. Surveys are being made for further extensions which, when built, will make a through line from Atlanta to New Orleans, 500 miles, it is said.

CENTRAL ONTARIO.—Contracts have been given by this company to WM. G. GIBSON, of Port Hope, Ont., to extend this road from Bird's Creek to Maynooth, Ont., eleven miles. Survey is under way for a further extension from Maynooth to Whitney, about 30 miles.

DELAWARE & HUDSON.—Company has awarded to ELMORE & HAMILTON, 93 State St., Albany, N. Y., the contract for straightening and improving the company's road-bed between Schenectady and Delanson, N. Y., a distance of 13 miles. Curves in the road are to be abolished, the grades made uniform and double-track laid. The contract price is reported to be $600,000 and the work must be completed within eight months. The contractors will establish an office in Schenectady in connection with the work.

GREAT NORTHERN.—Track has been laid on branches and extensions of the Great Northern system during the past year as follows: Vancouver, Victoria & Eastern, from Midway, B. C., to the international boundary line near Molson, Wash., 28.89 miles. Washington & Great Northern, from boundary near Molson toward Oroville, 24.81 miles. This line is under construction to the boundary north of Oroville, the distance from the boundary near Molson to the boundary north of Oroville being 48.46 miles. Dakota & Great Northern, Thorne to Dunseith, N. Dak., 7.61 miles; Berthold to Crosby, 27.58 miles of track laid, leaving 61.42 miles to complete; Aneta to Devils Lake, 58.6 miles. Connection with Midland Railway at Neche, N. Dak., .64 of a mile. Schurmeier cut-off, North Dakota, 4.52 miles. Midland Railway of Manitoba, from international boundary line to Portage la Prairie, Man., 77.01 miles. Brandon, Saskatchewan & Hudson Bay, from international boundary to Brandon, Man., 69.45 miles. Sioux City & Western, Sioux City to Ashland, Neb., 103.15 miles, of which 52 miles were completed in 1905 and 51.15 in 1906. Eastern Railway of Minnesota, extensions to mining spurs in Minnesota 5.67 miles. A. H. Hogeland is Ch. Engr., St. Paul, Minn.

LOUISVILLE & NASHVILLE.—Company will soon begin construction of the Pine Mountain Railroad from Williamsburg to Trace Branch, Ky., 22½ miles. W. H. Courtenay is Ch. Engr., at Louisville, Ky. During the past year construction work was accomplished as follows: Cumberland Valley division: Branch up left-hand fork of Straight Creek, 3.90 miles in length, of which 2.45 miles were laid during the year. This branch diverges from the Straight Creek branch near Pineville, Ky., and extends into the coal property of the Straight Creek Coal & Coke Co. Major branch extension, aggregating 2.20 miles in length, diverging from a point on the Chenoa branch, or the Cumberland River & Tennessee R. R. near Olcott, Ky., has been constructed to the coal property of Clyde Miller. A spur line diverging from the Blue Creek extension of the Birmingham Mineral division at Yolande, Ala., extending 1.12 miles to the coal mines of the Yolande Coal & Coke Co., all in Alabama, has been completed. During the year the revision of line and grades between Corbin, Ky., and Saxton, Ky., a distance of 25.9 miles, will be completed; 10.8 miles of this work should be credited to 1906. Of the revision of line and grades between Greenbrier, Tenn., and Guthrie, Ky., a distance of 25.70 miles, 16 miles should be credited to 1906. Of the 88.2 miles of new line from Etowah, Tenn., to Cartersville, Ga., known as the Atlanta division, the portion lying between Crandall, Ga., and Junta, Ga., a distance of 51.2 miles, was completed during the year. The Alaculsy spur from Crandall, Ga., to Alaculsy, Ga., a distance of 1.20 miles, was completed during the year. Maryville spur, extending from Armona, Tenn., to Maryville, Tenn., a distance of 3.90 miles, probably will be completed this year. Crooked Fork spur, from Kilsyth, W. Va., to Roosevelt, W. Va., 1.60 miles in length, was completed in 1906. In 1907 the work of revising the line and grades on the Henderson division between Greenbrier, Tenn., and Guthrie, Ky., will be completed. This all lies in the State of Tennessee. The revision of line and grades on the Kentucky division from Corbin, Ky., to Livingston, Ky., a distance of 31.70 miles, is now under way. The construction of the Pine Mountain Railroad from Williamsburg, Ky., to Trace Branch, Ky., a distance of 22.60 miles, will shortly be undertaken. The Skelton Creek extension of the Cain Creek branch of the North Alabama Railroad, extending from Vulcan, Ala., to Skelton Creek, Ala., 13.70 miles, will be completed early next year. A spur diverging from the Skelton Creek extension 11.6 miles from Vulcan, Ala., some 2.40 miles in length, and extending to the mine of the Lacey-Buck Iron Co., is under way and will be completed next year. The construction of double track and change of grade, Grace, Ala., to Hardy, Ala., about 17 miles, is now under way, and is expected to be completed sometime during next year. The construction of a branch diverging from the main track of the South & North Alabama Railroad near Helena, Ala., and extending about six miles into the Actin Coal Basin, will be completed during 1907. A spur track about 1½ miles long, extending from the O'Conner branch of the Alabama Mineral division at Gadsden, Ala., to the plant of the Alabama Consolidated Coal & Coke Co., will be constructed next year. A spur line 1.88 miles in length, being virtually an extension of the Hogeland branch, which latter diverges from the Linton branch near Coaldale, Ala., will be built to reach coal mine property of the Warrior Coal & Coke Co.

MARIANNA, BRINKLEY & WESTERN.—We are officially advised that contracts for building this line will be let soon by George W. L. Brown, Gen. Mgr., Box 366, Marianna, Ark. The line will extend from Marianna to Brinkley, Ark., 28 miles. All right-of-way is secured. Capital is ready and survey is made. Julius Lisser, St. Louis, Mo., is Pres.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—This company has completed 128.7 miles of road in North Dakota during 1906 as follows: Egeland branch, extended from Brambaugh to Armourdale, 10.3 miles; Flaxton line, Flaxton west to Ambrose, 50.9 miles; Drake line, Drake west to Dogden, 18.8 miles, and Max west toward Plaza, 36 miles; Garrison extension, Garrison north to Max, 13.7 miles. This leaves two gaps to complete on the Drake line from Dodgen to Max and from Ryder to Plaza, a total of 28.9 miles. Thos. Greene, Ch. Engr., Minneapolis, Minn. Contract will be let at once for building between Carrington, N. Dak., to Superior Wis., about 400 miles.

MISSOURI PACIFIC.—The company has recently awarded the following contracts for extending its lines: On the Gurdon and Fort Smith from a point near Caddo Gap, Ark., to a point near Black Springs, 9½ miles, to the DALHOFF CONSTRUCTION CO., Little Rock; and on the Springfield Southwestern from Crane, Mo., to Springfield, 34½ miles, to the WILLIER CONSTRUCTION CO., of Springfield, Mo.

NORTH CAROLINA.—The Kitchen Lumber Co. will build tramroads in and around Kitchen, N. C. Charles Kitchen, of Leon, Ky., is Pres.; R. H. Vansant, Vice-Pres.; John W. Kitchen, Treas., and James H. Kitchen, Secy. Company is in the market for logging cars, logging equipment, etc.

ROCKY MOUNTAIN RY.—T. S. Waltermeyer, Pres., Boulder, Colo., states that this road has been completed from Granby to Monarch, Colo., 13½ miles, and that it is proposed to extend it next spring from Granby to Walden, 60 miles. Chas. A. Wolcott is Vice-Pres., Boulder, Colo.; J. M. Rohrbaugh is Ch. Engr., Granby, Colo.

SOMERSET RY.—The extension of this line to Birch Point, on Moosehead Lake, opposite the Kineo House, was completed Nov. 30. Length of extension, Bingham to Birch Point, 50½ miles. MITCHELL & JOHNSTON, of Oakland, Me., were contractors for grading, tracklaying and ballasting. The bridges were all built by the BOSTON BRIDGE WORKS. Henry F. Hill, Augusta, Me., is Ch. Engr. A charter will be sought from the Maine Legislature this winter for a further extension into the Allegash region, a distance of about 130 miles. Reconnaissance for this proposed Allegash line will start immediately.

TEXAS NORTHERN.—Hans Helland, Ch. Engr., Cockrell Bldg., Dallas, advises us that company will let contracts for building between Dallas and Egan, via Mansfield, 38 miles, at once. Work consists of building a 160-ft. span over Trinity River, one mile of trestling, and three miles of grading, at present. Surveys are made and capital secured. Right-of-way is partly obtained. B. P. McDonald is Pres., Wilson Bldg., Dallas.

VIRGINIA & SOUTHWESTERN.—GROMMET BROS. & JOHNSON, of Alton, Ill., have contract for a 16-mile extension. E. S. Fraser is Ch. Engr., Bristol, Tenn.

WEATHERFORD, MINERAL WELLS & NORTHWESTERN.—Company has let a contract for grading 15 miles of line to D. J. GRIGSBY, of Mineral Wells, Tex.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

DANBURY, CONN.—N. Burton Rogers and John R. Perkins, of Danbury, and Irwin C. Atchison, of Sherman, will apply to the General Assembly at its approaching session, for a charter for an electric railway from Danbury, through New Fairfield, to Sherman, Conn., to Wabatuck, N. Y., and thence to Gaylordsville station in the town of New Milford, Conn., and also for spurs to Balls Pond and Squantz Pond in New Fairfield.

LEBANON, CONN.—We are officially advised that the Lebanon St. Ry. Co. will make application this week at first session of legislature for an extension of its charter. Company now has a charter covering construction of eleven miles. The line is to extend from Fitchville to South Manchester, via Lebanon, Chestnut Hill, Columbia, etc., about 27 miles. Final surveys have not been made. Right-of-way is not secured nor is capital for constructing the line. It will connect Norwich and Hartford, via Yantic and South Manchester. It will be several months yet before contracts will be let. L. E. Livermore is Pres., and R. E. Turner, Ch. Engr., at Lebanon, Conn.

NORWICH, CONN.—The Consolidated Railway Co. has submitted to the municipal authorities of Norwich a petition for a local franchise to double-track its line from Norwich to Taftville. The object is to provide for the additional business that will come to the line when the new electric road which is being constructed from Norwich to Central Village is completed. H. Bigelow is Supt., at Norwich.

ALBANY, N. Y.—The United Traction Co., of Albany, which has obtained control of the Hudson Valley Railway, is planning to make extensive improvements on that road. The officials of the company have just completed an inspection trip over the Hudson Valley line, which was made for the purpose of learning the needs of the road. Among the improvements to be made will be the double-tracking of the entire line, and new equipment will be purchased. It is said a large amount of money will be expended in placing the road on a paying basis. Edgar S. Fassett, Albany, N. Y., is the newly appointed general manager of the Hudson Valley Railway, and he will have charge of making all improvements.

NEW CASTLE, PA.—We are advised by J. H. Veazey, Pres. of the New Castle & New Wilmington R. R. Co., at New Wilmington, that surveys are partly completed for the projected line from New Castle to Coal Town and New Wilmington, Pa., ten miles. Right-of-way is obtained and capital is partly secured. Active work will not begin before April 1, after which date contracts will be let. Company is capitalized at $60,000. Governor has recently approved its charter.

YORK, PA.—The Hanover & York Street Railway has received its charter and entered the same on record in the recorder's office here. It provides for building an electric railway beginning at the junction of West King St. and Highland Ave., West York, continuing on through West Manchester Township to Bear Station and Spring Grove. The capitalization is $120,000. The directors are: W. F. Bay Stewart, George H. Frazier, of Philadelphia; Grier Hersh, of York; George S. Schmidt, of York; A. H. Howard, of York; David Young, of Newark, N. J., and Thomas Newall, of Philadelphia.

SOMERSET, PA.—The Governor has approved the merger of the Somerset County Street Railway Co. and the Pennsylvania & Maryland Street Railway Co. under the name of the Pennsylvania & Maryland Street Railway Co., with a capital of $410,000, to construct lines in Somerset County and into Maryland. Judge Kooser, of Somerset County, has granted the application of the Meyersdale & Salisbury Street Railway Co. for a preliminary injunction restraining the Pennsylvania & Maryland Street Railway Co. from putting down its track on right-of-way claimed by the plaintiff in Elk Lick and Summit Townships, Somerset County. Neither of the contending companies has laid any track yet.

MYERSVILLE, MD.—We are officially advised that the Catoctin & Pen Mar R. R. Co. has made a preliminary survey for its projected line from Myersville to Wolfsville, Md., and Pen Mar, Pa. H. M. Warrenfeltz is Pres., and Dr. A. J. Smith is Secy., Wolfsville, Md.

HAGERSTOWN, MD.—The Hagerstown Railway Co. proposes to increase its capital from $200,000 to $1,000,000. The increase is to be used for extensions. W. C. Hepperle is Supt. and Pur. Agt., at Hagerstown.

DEFIANCE, OHIO.—The Northwestern Ohio Electric Ry. Co., we are officially advised, will build a 40-mile electric line connecting Defiance, Evansport, Bryan and Montpelier, Ohio, and Camden and Coldwater, Mich. Right-of-way is secured and surveys made. J. A. Crow is Pres., Defiance, Ohio.

MANSFIELD, OHIO.—The R[illegible]s & Abbott Co., Electric Bldg., Clev[illegible] have a corps of civil engineers in the [illegible] making a survey of the proposed lin[illegible] Mansfield to Mt. Vernon and to Co[illegible]s. This territory has recently come in[illegible] eminence through the discovery of natu[illegible]s.

CRAWFORDSVILLE, IND.—Indianapolis, Crawfordsville & Danville [illegible]tion Co. has filed articles of incorpora[illegible] with the Secretary of State. The cap[illegible]tion is $600,000. The object of the co[illegible]y is to build an interurban railway fro[illegible]wfordsville, Ind., to Danville, Ill., by [illegible] of Covington, Veedersburg and the Sta[illegible]te. The road, when completed, will be [illegible]rated in connection with the Indianapo[illegible] Northwestern from Crawfordsville to [illegible]napolis. The incorporators are: John J. A[illegible]l, T. B. McMath, F. M. Durbin, W. F[illegible] Holland and Hugh J. McGowan. This i[illegible] second company to be incorporated to bu[illegible] between Crawfordsville and Danville.

BELLEVILLE, ILL.—We are [illegible]ially informed that survey has been m[illegible] for the Belleville & Pinckneyville Tra[illegible] Co.'s line, to be built from Belleville, [illegible]a Freeburg, New Athens, Marissa, Tilde[illegible] Coulterville, etc., to Pinckneyville, Ill., [illegible] miles long. Harper Bros., Sexton Bldg., East St. Louis, Ill., are Engrs.-in-Chi[illegible] L. D. Turner, of Belleville, is Pres. G[illegible]ter part of the right-of-way is secured. The Board of Trustees of the Village of Fre[illegible]burg has granted a 20-year franchise to the Belleville & Pinckneyville Traction Co. to operate electric lines on Washington, High and Apple Sts., in Freeburg, and along the Belleville and Freeburg plank road.

FAIRFIELD, IOWA.—We are officially informed that the Iowa-Missouri Traction & Power Co. will probably let contracts between Feb. 1 and April 1 for constructing its line from Fairfield to Memphis, Mo., 52 miles. Harrison Blackledge is Pres., and J. W. Andrews is Ch. Engr., Keosauqua, Iowa. Survey has been made and right-of-way practically obtained. Capital is contracted for. As noted on Dec. 6, contract for power dam for this line was let to the AMBURSEN HYDRAULIC CONSTRUCTION CO., 176 Federal St., Boston, Mass.

SPRINGFIELD, MO.—We are officially advised that the Kansas City & Springfield Southern Ry. Co. (formerly the Kansas City, Nevada & Springfield R. R. Co.) has made surveys and secured right-of-way for its proposed line from Springfield to Stotesbury, Mo., 150 miles. Contracts will be let early this year. Capital for construction has been obtained. W. B. Forsyth is Pres., and Thomas P. McDonough is Ch. Engr., Tacoma Bldg., Chicago, Ill. Noted last week.

TACOMA, WASH.—The Puyallup Valley Northern Rapid Transit Co. has been incorporated, with a capital of $3,000,000, to operate a system of electric interurban railways from Tacoma to Puyallup, Sumner, Auburn, Kent and Seattle. The trustees are: Frederick J. Chamberlain, John Mills, F. S. Martin, W. R. Scott, Charles Fulmer, L. A. Chamberlain, of Puyallup, and August Von Boecklin, L. C. Stevenson and H. H. Blackburn, of Tacoma. The principal office of the company will be in Puyallup. It is announced that the franchises have been secured for the entire line and the survey has been made. Present plans are to begin building the line soon after Jan. 1. The proposed line will be about 40 miles long. It will connect Tacoma with Puyallup and Sumner by the most direct line, and from the latter place will run north through a thickly populated farming country to Seattle.

SPOKANE, WASH.—Isaac W. Anderson, of Spokane, has been elected chief executive officer of a company backed by Rhodes, Sinkler & Butcher, bankers, 432 Sansome St., Philadelphia, Pa., for the consolidation of 14 electric power, traction and light plants located at Eugene, Springfield, Albany, Cottage Grove, Corvallis, Seaside, Roseburg, Baker City and the traction company at Walla Walla, Wash., and Pendleton, Ore., Dallas and Albany; and gas plants at North Yakima, Wash., and Lewiston, Idaho. The plants are valued at $6,000,000. It is understood others are to be taken over. A. L. Welsh, of Portland, Ore., is manager of the consolidated properties.

SEATTLE, WASH.—Mark Lowd, Ch. Engr. of the Seattle Electric Co., advises us that contracts have been let for trestles on new line to Fauntleroy Park, 8½ miles from Pioneer Square, Seattle, as follows: To THOSSWIG & LINDLAND, for trestle No. 1, 8,460 ft.; No. 2, 145 ft.; No. 3, 600 ft. To WILLIAM STANLEY & Co., Burke Block, City, No. 4, 325 ft.; No. 5, 250 ft.; No. 6, 374 ft. Grading is about finished. Contractor is DAVID SWANK, of Seattle. About one mile of track has been laid. All rail and overhead work is done by Electric Co.'s forces. Company is also building a line to Alki Point, 7½ miles from Pioneer Sq.

WENATCHEE, WASH.—We are officially advised that only preliminary work has been done by the Big Red Apple Ry. Co. in connection with its proposed electric line between Wenatchee and Leavenworth. M. O. Tibbetts is Pres., at Wenatchee, and L. W. Rice is Ch. Engr., at Seattle, Wash.

SAN FRANCISCO, CAL.—We are officially advised that the Parkside Transit Co. was granted a 25-year franchise on Dec. 31 by the Board of Supervisors, George B. Keane, Clk., for construction five miles of trolley line on W St., 46th Ave., T St., 33d Ave., V St., 19th Ave. and private right-of-way. Surveys have been made and capital secured. J. E. Green is Pres., and H. Fairchild is Ch. Engr., Golden Gate Ave. and Polk St. Company bid 3% of gross receipts for first five years, 4% next ten years, and 5% last ten years.

VALLEJO, CAL.—Melville Dozier, Jr., 649 Mariposa St., Oakland, Cal., Pres. and Ch. Engr. of the Vallejo & Northern Ry. Co., informs us that capital is secured for building this company's proposed line from Vallejo to Woodland, by way of Fairfield, Vacaville and Winters, about 70 miles, includ-

ing branches. Surveys are being made and right-of-way is now being obtained. Work will be heavy in one mountain pass, but remainder is over regular country and heavy enough to secure easy grades and sufficient drainage. Contracts will be let soon.

ST. THOMAS, ONT.—It is reported here that the Detroit United Ry. Co. is about to take over the Southwestern Traction Co.'s lines and charters and to construct a number of new lines around this city at once. F. W. Brooks is Asst. Gen. Mgr. of the United Co., Detroit, Mich.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

GREENFIELD, MASS.—It is reported that Rossman & Mason, of Keene, N. H., have secured the controlling interest in the stock of the Greenfield, Mass., Gas Light Co. They will spend about $75,000 in improving the plant. The present capital stock is $50,000.

BUFFALO, N. Y.—Francis G. Ward, Comr. Dept. Public Works, has been preparing specifications for a new contract for gas lighting on the streets, the contract to take the place of that now running between the city and the Buffalo Gas Co.

HAMBURG, N. Y.—It is reported that the Niagara, Lockport & Ontario Power Co., Fidelity Bldg., Buffalo, has been granted a 25-year street lighting franchise by the Town Board. R. D. Mershon, 60 Wall St., New York, is Ch. Engr. of the power company.

NEW YORK, N. Y.—Bids are asked until Jan. 14 by C. B. J. Snyder, Supt. School Bldgs., New York, for alterations to electric equipment of Jamaica Training School, Boro. Queens.

MOHAWK, N. Y.—The Board of Supervisors, at Herkimer, has adopted a report authorizing the Committee on Military Accounts to erect in the armory at Mohawk an electric lighting plant consisting of a gasoline engine, generator and storage batteries, with necessary foundations, belts and connections, the cost not to exceed $3,500.

TRENTON, N. J.—It is reported that the Public Service Corporation, John A. Wilson, Supt., Trenton, will erect an additional office building here, and double the capacity of its power plant. The improvements to cost $500,000.

PHILADELPHIA, PA.—Bids are asked until 11 a. m., Feb. 9, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for furnishing one motor generator set for the Navy Yard, League Island, Philadelphia. Specifications are on file at office of Engineering News, New York, N. Y.

THE PHILADELPHIA ELECTRIC CO., Tenth and Sansom Sts., is reported to have secured the contract for electric lighting of the city for the year 1907, at $1,124,224.

ALTOONA, PA.—The contract for lighting the city for three years has been awarded to the EDISON ELECTRIC ILLUMINATING CO., at $50 per year, for 400 lamps.

MIDLAND, MD.—William F. Broderick, A. A. Davis and others will organize a company to establish an electric light plant.

WASHINGTON, D. C.—We are officially advised that the following are the bids opened on Dec. 26 at the office of Elliott Woods, Supt. U. S. Capitol Bldg. and Grounds, for heating, lighting and power plant equipment for capital: (a) turbo engines; (b) cross compound engines; (c) engine driven alternators; (d) engine exciter alternators; (e) exciter storage battery; (f) motor generator sets; (g) switchboards; C. E. De Murratt, New York, N. Y., (a) $550,183 and $456,956; (b) $532,721 and $439,494. General Electric Co., Schenectady, N. Y., (a) $544,877. Providence Eng. Wks., New York, N. Y., (b) $239,200. McIntosh Seymour & Co., Pittsburg, Pa., (d) $263,335. Gould Storage Battery Co., 1 West 34th St., New York, N. Y., (e) $15,625. Electric Storage Battery Co., 19th St. and Allegheny Ave., Philadelphia, Pa., (e) $14,078 and $13,728. Westinghouse Electric & Mfg. Co., Pittsburg, Pa., (a) $533,728, (c) $240,174, (e) $14,158, (f) $177,576, (g) $101,820.

COLUMBUS, GA.—Power will be obtained from the Chattahoochee River at a point between Columbus and West Point, by the Columbus Power Co. Boston capitalists are interested.

DE FUNIAK, FLA.—An electric lighting plant will soon be installed in this place. Malcolm Bruce is interested in the plant.

DANVILLE IND.—The Danville Electric Light Co.'s plant has been sold to James M. Lynch. Mr. Lynch has announced that he will remodel the plant and add new machinery and equipment.

MARION, IND.—It is reported that the Marion Lighting & Heating Co. has decided to extend its plant. William F. Thompson is Ch. Engr. George N. Tidd is Mgr.

DELRAY, MICH.—Plans are being made by the Detroit Edison Co., Detroit, for an addition to its plant at Delray, which will nearly double its capacity. E. W. Wetmore, Detroit, is Pres.

KALAMAZOO, MICH.—The Commonwealth Power Co. will build a $100,000 dam at Kalamazoo during the coming year, to provide additional power. J. B. Foot is Secy. and Mgr., at Jackson.

STAMBAUGH, MICH.—It is reported that the Village Council has granted A. J. Lytle, of Norway, Mich., a franchise for an electric light plant. The power plant will be located at Hemlock Rapids, on Point River, about eight miles from Stambaugh. It is reported that about $200,000 will be expended.

EAU CLAIRE, WIS.—It is reported that the Northwestern Lumber Co. has decided to expend $90,000 for a power plant, to furnish electricity in Eau Claire.

KILBOURN, WIS.—The LA CROSSE STONE CO., of La Crosse, is reported to have secured the contract to construct a dam in Kilbourn for the Southern Wisconsin Power Co., whose capital is $1,500,000. The work will necessitate the removal of 100,000 yds. of solid rock. The ditch will be approximately 250 ft. wide, 500 ft. long and about 100 ft. deep.

MILWAUKEE, WIS.—Bids will soon be asked by this city for work on the projected municipal lighting plant. Charles G. Poetsch is City Engr.

FRASER, IOWA.—The C. B. SHERMAN CO., of Boone, has been awarded the contract for building the power house of the Newton & Northwestern Ry. Co., at Fraser.

BRAINERD, MINN.—It is reported that the Brainerd Hydro-Electric Power Co. proposes to construct a power dam on Crow Wing River, about nine miles west of this town.

FAIRMONT, MINN.—Bids are asked until Jan. 15 by H. P. Edwards, County Audr., Fairmont, for electric fixtures for the Martin County court-house at Fairmont.

TRACY, MINN.—The ELECTRICAL MACHINERY CO., 14th Ave. N. E. and Tyler St., Minneapolis, has secured the contract to furnish machinery for the electric light plant, at $9,165. A contract has been awarded to GEORGE J. CADWELL & CO., of Minneapolis, for a 120-HP. duplex compound American Ball engine and one 60-HP. simple American Ball engine, for the new electric light station.

BEATRICE, NEB.—M. E. SPRINGER, of Beatrice, has secured the contract for improvements to the plant of the Beatrice Gas & Power Co., to cost between $75,000 and $100,000. R. R. Kyd is Mgr.

BUTTE, MONT.—A power plant is planned for the upper Madison River by the Madison Power Co., and the electricity generated will be brought to Butte. The pole line will be 150 miles in length.

DE SOTO, MO.—It is reported that the citizens have voted in favor of granting a franchise to Charles A. McGee, of St. Louis, to erect and maintain a gas plant here for the purpose of furnishing lighting and fuel gas. Estimated cost, $60,000.

ARGENTA, ARK.—Argenta Light & Power Co. has awarded contract to J. H. LEVECK, at $5,426, for erection of powerhouse, 40 × 93 ft. The building will be of white brick, with concrete floor. J. M. Griffin is Pres.

CHILDRESS, TEX.—P. J. ROBERTSON, of Dallas, is reported to have secured a franchise for an electric light and power plant in Childress.

DALLAS, TEX.—It is reported that the Baptist Sanitarium Association will build a $100,000 power-house in connection with sanitarium buildings now in course of construction.

DENVER, COLO.—The Colorado Central Power Company, in which David D. Moffatt and Thomas F. Walsh are interested, is reported to be planning to construct three dams on two rivers in Colorado for the purpose of generating about 75,000 HP., which will be transmitted electrically a distance of from 150 to 200 miles to various points throughout the state.

SAN RAFAEL, CAL.—The San Rafael Gas & Electric Co. will soon extend its gas mains so as to supply San Anselmo, Ross, Larkspur, Corte Madera, Belvedere, Tiburon, Sausalito and Mill Valley with gas, also changing its plant from here to tidewater, where it will install a plant sufficient to meet these demands.

SALT LAKE CITY, UTAH.—Bids are asked until about Feb. 15 for construction work for the Utah Irrigation & Power Co. I. C. Macfarlane, of Price, is Engr.; T. H. Fitzgerald is Pres., 433 D. F. Walker Block, Salt Lake City.

STONEWALL, MAN.—The Town Council is considering the installation of an electric lighting plant. Ira Stratton is interested.

LADNER, B. C.—An electric light and power plant is to be erected at Ladner. The plant will be operated by water power.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

GUILEFORD, ME.—At a special town meeting, held recently, it was voted to build a new steel bridge across the Piscatquis River, in place of the present wooden structure. Work will commence at once.

BALTIMORE, MD.—The Baltimore & Ohio R. R. Co. will construct a bridge across the Susquehanna River. Estimated cost, $1,250,000. D. D. Carothers, Baltimore, Md., is Ch. Engr.

The city will build a concrete bridge, about 150 ft. long, over Stony Run and the Maryland and Pennsylvania tracks. B. T. Fendall is City Engr.

EDENTON, N. C.—We are officially advised that bids will soon be asked by the Norfolk & Southern R. R. Co. for constructing bridge across Albemarle Sound between here and Mackey Ferry. Bridge will be about 5½ miles long, and have two 140-ft. draw spans. J. A. Barron is Supervisor Bridges and Buildings, Berkley, Va.

EAST POINT, GA.—A viaduct will be constructed over the tracks of the Atlanta & West Point and Western Ry. Co. for the trolley extension from this city to Hapeville.

CULLMAN, ALA.—Bids are asked by the Court of County Commissioners until noon, Feb. 14, for the construction of a steel bridge over Eight Mile Creek, on the Cullman and Joppa Road. (Advertised, Engineering News.)

NEW ORLEANS, LA.—The Council Committee contemplates constructing a bridge over Bayou St. John at Esplanade St. Cost, $40,000.

BRIDGEPORT, OHIO.—The County Commissioners have decided to erect a new bridge over the creek between this city and Kirkwood.

TOLEDO, OHIO.—The Toledo Railways & Light Co. will remodel the Sumner St. bridge over the Lake Shore & Michigan Southern Ry. Co.'s tracks. J. T. Ross is Ch. Engr., Toledo.

CINCINNATI, OHIO.—Bids are asked until Jan. 25 by the Board of County Commissioners, W. H. Blair, Pres., for constructing the substructure and superstructure of a bridge on Johnson Road, Green Township.

CAYUGA, IND.—The County Commissioners have awarded the contract for constructing the bridge across the Wabash River at Cayuga to JAMES F. PIERCE, of Delphi, at $22,518. Other bidders were as follows: Lafayette Engineering Co., $29,000, and the Midland Bridge Co., of Kansas City, Mo., $34,482.

TAYLORVILLE, ILL.—Bids are asked by W. D. Waller, of Taylorville, Chn. Bridge Com., until Jan. 15, for constructing a steel bridge of four 96-ft. spans, to cost about $8,025. We are officially advised that this is a joint county and township bridge. J. W. Dappert is Engr., of Taylorville.

CHICAGO, ILL.—Five new viaducts will be constructed by the Chicago & Northwestern Ry. Co. They will occupy the full width of North State St., Dearborn Ave., North Halsted St., Grand Ave., and Erie St. Each will contain a double roadway and a 10-foot walk on each side. I. F. Stern is Engr. Bridges, at Chicago.

KENOSHA, WIS.—It is reported that over $86,000 will be spent next year by this city for bridges and other public improvements, including pavement. The Chicago & Milwaukee Electric Co. will give this amount in return for a franchise just secured to build through the city.

LA CROSSE, WIS.—The LA CROSSE BRIDGE & STEEL CO. has been awarded the contract to construct a two-span steel bridge across the McGillivray Turnpike.

DES MOINES, IOWA.—An appropriation of $5,000 has been passed by the City Council for removing the old Sixth Ave. bridge. George D. Dobson is City Engr.

HALLOCK, MINN.—Bids are asked until Jan. 31 by N. G. Brown, Village Clk., for constructing an iron bridge, having a 100-ft. span, over the Two Rivers River.

ST. PAUL, MINN.—A new bridge will soon be constructed, to cost $250,000. Test borings and soundings are now being made. It will be built by the city of St. Paul and the Twin City Rapid Transit Co., of which E. H. Scofield is Ch. Engr., Minneapolis, Minn.

ATCHISON, KAN.—A survey for a viaduct over the tracks of the Missouri Pacific and Atchison, Topeka & Santa Fe Rys. at 14th St. is being made by Fred. Giddings, City Engr.

LAKE VILLAGE, ARK.—Harry E. Cook, County Judge of Chicot County, has advertised for bids for the construction of the following bridges: One bridge across Fish Bayou, in Alexander Township, about 250 ft. long; one bridge across Black Pond Bayou, in Bowie Township, about 60 ft. long; one bridge across Cany Bayou, in Bayou Macon Township, about 200 ft. long; one bridge across Big Lake, in Louisiana Township, about 300 ft. long; one bridge across Pap's Bayou, on Bayou Macon in Carlton Township, about 150 ft. long.

BROWNSVILLE, TEX.—The site has been approved for the proposed bridge across the Rio Grande between Matamoras, Mexico, and Brownsville, to connect the St. Louis, Brownsville & Mexico and the National R. R. of Mexico, which had already been agreed upon by the National interests. It is understood that the bridge will be built and used jointly by the two roads. James M. Reid is Ch. Engr., Mexico City, for National Lines; J. N. Miller is Vice-Pres. and Gen. Mgr. of the St. L., B. & M., at Kingsville, Tex.

TEMPLE, TEX.—It is reported the Commissioners' Court of Bell County will issue bonds amounting to $20,000 for replacing and repairing bridges.

NORTH YAKIMA, WASH.—The County Commissioners is stated to have awarded the bridge to replace the Selah bridge, destroyed by the recent floods, at a point in line with the section line that intersects with North Third St. The new bridge will cost about $20,000.

SPOKANE, WASH.—The County Board of Commissioners are stated to have awarded the contract for building the bridge on D St., just east of the city limits, to WILLIAM OLIVER, for $12,769. The bridge is to be of steel with concrete piers.

YAKIMA, WASH.—The County Commissioners have decided to replace the Selah bridge with a new structure to cost about $20,000.

SACRAMENTO, CAL.—We are officially advised that the AMERICAN BRIDGE CO., 42 Broadway, New York, has been awarded the contract to supply the Southern Pacific Co. with all bridge material required during 1907. The Southern Pacific Co. will build the bridge over the Sacramento River at this city with its own forces.

WINTERS, CAL.—A new steel bridge is to be constructed here over the Putah Creek by the Southern Pacific Co. The supervisors of Yolo County have plans.

ST. JOHN, N. B.—A large suspension bridge here is to be strengthened to enable it to be used by electric cars. The work is in charge of Wm. Hildenbrand, 1 Broadway, New York, N. Y. About $25,000 will be expended.

ST. JOHN, N. B.—The Canadian Pacific Ry. Co. is having plans prepared for an overhead bridge to be erected here. Address W. F. Tye, Ch. Engr. Lines East, Montreal, Que.

BLUEVALE, ONT.—Bids are asked by D. Patterson, County Comr., Auburn, Ont., until Jan. 21, for the erection of the superstructure of a steel bridge to be erected over the Maitland River at the Village of Bluevale, County of Huron, about one mile from the G. T. R. station. The bridge is to be one span 100 ft. clear between abutments. Pratt truss 18 ft. high from floor of bridge, seven panels, nine joists, seven ins., roadway to be 16 ft. wide. Railing to be four feet high of four tiers of 1½-in. gas pipe. Floor to be of concrete not less than five inches thick and composed of one part best Portland cement to three parts sand and gravel and to be properly reinforced with iron. The bridge must be strong enough to carry traction engines and all ordinary traffic. The bridge will be about 14 ft. from the bed of stream; good bottom. Bridge is to be completed on or before July 25, 1907.

NEW LISKEARD, ONT.—It is reported that bids will soon be asked for constructing single-span steel bridge across the Wabbi River. Bridge is to be 75 ft. long and 22 ft. wide with sidewalks five feet wide on each side.

OWEN SOUND, ONT.—The Bridge & Terminal Co. is applying for incorporation to construct a bridge over Owen Sound Bay.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

AMHERST, MASS.—Preliminary plans have been received from McKim, Mead & White, of New York, N. Y., for the biological and geological building for Amherst College. Andrew Carnegie has given $75,000 toward this building and the alumni has raised an equal amount.

SPRINGFIELD, MASS.—Plans are being prepared by Kendall, Taylor & Stevens, Archs., 93 Federal St., Boston, for a maternity hospital to be built at Springfield. Estimated cost, $200,000. Dr. O. W. Roberts is Chn. of Com.

MAYVILLE, N. Y.—It has been decided to erect a $130,000 court-house here. W. J. Beardsley is Arch.

ALBANY, N. Y.—Andrew S. Draper, Comr. of Education, on behalf of the Board of Award, consisting of the Governor, Speaker of the Assembly, Regent Vander Veer, the State Architect and himself, recently announced the ten successful authors in the first competition of designs for the new State Education Building. They are as follows: Allen & Collens, 6 Beacon St., Boston, Mass.; Martin C. Miller and Walter P. R. Pembler, Mutual Life Bldg., Buffalo, N. Y.; Bell & Corbett, 31 Union Sq., New York; George Cary, 184 Delaware Ave., Buffalo, N. Y.; Palmer & Hornbostel, 63 William St., New York; Wells & Hathaway, 1118 Tremont Bldg., Boston; Hedman & Schoen and Goodwin & Jacoby, 302 Broadway, New York; J. H. Freedlander, 244 Fifth Ave., New York; Howells & Stokes, 100 William St., New York; Frederic W. Brown and A. Ten Eyck Brown, 1819 19th St., Washington, D. C. The Board of Award will notify the ten successful authors to meet the board for consultation as to the second competition. The Governor is Chn. of Board.

NEW YORK, N. Y.—Following are the bids received Dec. 26 by C. B. J. Snyder, Supt. School Bldgs., for (a) general construction of Public School No. 5; (b) heating and ventilating apparatus in Public School No. 104; (c) same, Public School No. 8; (d) same, Eastern District High School; all Boro. of Brooklyn; (e) sanitary plumbing in Public School No. 12; (f) installing electric lights, bells, etc., in Public School No. 27: R. E. Heningham, 1 Madison Ave., (a) $397,497; Clarke & Stowe, 221 Greenpoint Ave., Brooklyn, (a) $406,000; George F. Driscoll, 391 Fulton St., Brooklyn, (a) $407,500; P. Clearys, 235 Bainbridge St., Brooklyn, (a) $408,837; John Auer & Son, 957 Broadway, Brooklyn, (a) $399,850; Thomas Cockerill & Son, 147 Columbus Ave., New York, (a) $408,000; Thomas McKeown, 521 West 110th St., New York, (a) $398,700; Blake & Williams, 211 West 20th St., (b) $25,379, (c) $27,466; E. Rutzler & Co., 127 White St., (b) $27,000, (c) $27,924; Baldwin Engineering Co., 107 West 17th St., (b) $28,960; Monad Engineering Co., 147 Cedar St., (b) $19,100, (c) $26,040; Walker & Chambers, 50 East 20th St., (c) $24,970; Griffin & Co., 150 Nassau St., (d) $47,297; Pete & Powers, 225 Fourth Ave., (d) $41,368; (f) $14,660; Fred Pearce Co., 20 Rose St., (d) $39,785, (f) $14,478; Commercial Construction Co., 1 Madison Ave., (d) $39,833; Stephen Hewitt Engineering Co., 13 Park Row, (d) $44,945; Frank E. Gore, 220 Broadway, (d) $38,920, (f) $13,470; Thomas P. McLaughlin, 38 Park Row, (e) $36,800; Frank J. Fee, 411 West 34th St., (e) $39,840; W. C. Ormond, 909 President St., Brooklyn, (e) $38,740; James Harley, 288 Flatbush Ave., Brooklyn, (e) $39,500; C. Nally, 2832 Broadway, (e) $39,700; George E. Gibson, (e) $38,920; T. F. Jackson, 590 Columbus Ave., $14,228.

NEW YORK, N. Y.—George Keister, Arch., 11 West 29th St., is preparing plans for a theater to be located on the north side of 161st St., 200 ft. east of Washington Ave., for the Bronx Opera House Co. David Belasco is Pres.; Myer R. Bimberg is Vice-Pres., 111 West 44th St. The building will have four stories and will be 100 × 169 ft., brick, stone and terra cotta, structural steel and iron, fireproof construction. Estimated cost about $250,000. The vice-president will let all contracts.

Howells & Stokes, Archs., 100 William St., have prepared plans for a studio and apartment building, to be located on 77th St., 150 ft. east of Columbus Ave., for Walter Russell, 15 West 67th St. The building will be twelve stories high, 100 × 102 ft., of brick, stone, steel skeleton, fireproof construction, with four elevators, electric wiring, etc. Estimated cost, $1,000,000.

F. H. Pfluger, 32 Union Sq., has plans ready for bids for a loft building, at 330 and 332 Fourth Ave., for Mrs. P. Friedeberg, 2304 Bassford Ave. The structure will have eleven stories and will be 50 × 80 ft. Estimated cost, $150,000.

Goldner & Goldberg, Westchester and Jackson Aves., have prepared plans for three flat buildings to be built on 29th St., 180 ft. west of First Ave., for the Bathgate Realty Co., 21 East 14th St. Estimated cost, $120,000.

Plans have been filed for enlarging the 12-story Columbia office building, owned by Spencer Aldrich, at the northwest corner of Broadway and Morris St., extending through to Trinity Pl. Three stories are to be added and the Broadway front remodeled. The elevators and interior equipment also will be improved. The alterations will cost $175,000,

according to the estimate of the architects, W. H. W. Youngs and F. T. Cornell, 125 East 23d St.

The plans have been filed for a 6-story brick flat and store for Moersch & Willie, 29 Tremont Ave. The building will be 100 x 90 ft., and will cost $125,000. J. E. Scharsmith, 500 Fifth Ave., is Arch.

NEW YORK, N. Y.—Bids are asked until 10 a. m., Jan. 16, by Theodore A. Bingham, Police Comr., for completing contract executed by Thomas G. Carlin July 29, 1904, which has been declared abandoned. For furnishing materials necessary to build and complete the new station-house, prison and stable for the 72d Precinct on the south side of Lawrence Ave., 300 ft. east of Third St., Boro. of Brooklyn.

Bids are asked until 11 a. m., Jan. 10, by Louis F. Haffen, Pres. Boro. of the Bronx, for erection and completion of an office building to be erected on the plot of land situated on the west side of Olinville Ave., 100 ft. north of Magenta St., Williamsbridge, Boro. of the Bronx.

FORT HANCOCK (Highlands post-office), N. J.—Bids are asked until 3 p. m., Feb. 11, by the Commanding Officer at this post, for constructing ordnance barracks at Sandy Hook Proving Ground. (Advertised, Engineering News.)

CAMDEN, N. J.—GEORGE A. GLENN & CO., 930 North Eighth St., Philadelphia, Pa., has secured the contract for constructing the new theater for the M. W. Taylor Amusement Co., at Newton Ave. and Walnut St., Camden, N. J. Estimated cost, $100,000. Plans and specifications were prepared by Thomas Stephens, Arch., Masonic Temple Bldg., Camden.

MONTCLAIR, N. J.—FREDERICK KILGUS, 13 South Sixth St., Newark, N. J., has been awarded the contract for erection of the new State Normal School at Montclair Heights. His bid was $198,800. The other bidders and the amount of each follow. Joseph Jukes, Jersey City, $221,779; C. W. Kafer, Trenton, $231,597; P. W. Van Kirk, Paterson, $235,333; David Henry Building Co., Paterson, $199,887; J. S. & L. Carson, Montclair, $259,429; J. W. Lanning & Son, Trenton, $209,273; L. W. Seaman & Sons Co., Brooklyn, N. Y., $245,000.

NEWARK, N. J.—It is reported that John C. Neale, of the U. S. Steel Corporation, 71 Broadway, New York, N. Y., has announced that it is the intention of the corporation to erect a warehouse at Waverly, east of the Pennsylvania R. R. tracks. Estimated cost, $1,000,000.

PHILADELPHIA, PA.—Joseph N. Huston, Arch., Witherspoon Bldg., has prepared plans for six stores on 15th St., extending from Sansom to Moravian St., for the Union League Club. Cost, $1,000,000.

Bids are asked until Jan. 10 by Ballinger & Perrot, Archs., 1200 Chestnut St., for restoration of the stable recently destroyed by fire at 472-478 York Ave., Philadelphia, for the Michael Devlin Estate. The building will have a frontage of 80 ft. on York Ave. and a depth of 47 ft. It will have three stories with walls of brick with bluestone trimmings and columns, floors and roof of wood construction. The new building will make provision for 50 horses, with wagon room, and a portion of the stalls on the first floor and the balance of the stalls on the second floor, the horses obtaining access to same by means of an inclined runway. The third floor will be used for wagon storage and for hay and feed room. A wagon lift will be installed.

PHILADELPHIA, PA.—Horace Trumbauer, Arch., Land Title Bldg., has plans about ready for bids for the 10-story Y. M. C. A. building at 1417-1423 Arch St. Brick, stone and steel fireproof, slag roof, open plumbing, tile and marble work, plate glass, electric light fixtures, will be used. Estimated cost, $500,000.

It is reported that a 5-story brick, terra cotta and stone addition is to be erected to the Lit Bros.' department store at Seventh and Market Sts., to cost $150,000.

Bids are soon to be asked for erection of an administration, store, public and private ward buildings for the Municipal Hospital in the 33d Ward. Estimated cost, $750,000.

Joseph M. Huston, Witherspoon Bldg., is reported to have prepared plans for a 7-story building to be erected at Broad and Walnut Sts. for the Manufacturers' Club, to be used as a club-house. Probable cost, $2,000,000.

Plans are being prepared, it is reported, for the erection of a 16-story office building, to be erected on the site of the old Hazeltine Bldg., at 1418 Chestnut St. Estimated cost, $2,500,000.

BALTIMORE, MD.—Owens & Sisco, Continental Bldg., have prepared plans for a large addition to the building of the Terminal Warehouse Co., at Front and Constitution Sts. The building will have four stories and will be 150 x 150-ft., of brick and steel construction, with electric and gas fixtures, skylights, etc. Estimated cost, $100,000.

WASHINGTON, D. C.—Bids are asked by Elliott Woods, Supt. U. S. Capitol Building and Grounds, Washington, until noon, Jan. 23, for steel framing for roof of office building, House of Representatives. (Advertised, Engineering News.)

WASHINGTON, D. C.—The time of opening of bids for interior marble work for the rotunda section and main stair, Senate Office Bldg., Washington, has been postponed from noon, Jan. 5, to noon, Jan. 12, at which time they will be opened at the office of Elliott Woods, Supt. of the U. S. Capitol Buildings and Grounds, Washington, D. C. Bids for this work were opened Nov. 21, but were all rejected because of insufficient competition.

A permit has been issued to George H. Higbee to construct a 9-story steel and brick office building at 1345 F. St., N. W. H. L. A. Jekel is Arch.; Edwin Gilbert & Co. are Builders, Land Title Bldg. Estimated cost, $140,000. The work of excavating the foundation has already been begun.

NEWPORT NEWS, VA.—The General Manager of the Newport News Shipbuilding & Drydock Co. announces that the company will at once begin the construction of a large fireproof structure to replace the frame and sheet-iron building that was destroyed by fire lately. It is estimated now that the loss from the fire will be in the neighborhood of $300,000, partially covered by insurance. C. B. Orcutt is Pres.

FORTRESS MONROE, VA.—Bids are asked until noon, Feb. 4, by Major Joseph E. Kuhn, Engr. Office, Custom House, Norfolk, for constructing a brick storehouse at Fort Monroe. (Advertised, Engineering News.)

NORFOLK, VA.—A. E. Krise and Stephenson & Taylor will construct a 3-story fireproof building with office and sleeping apartments above at a cost of about $125,000.

NORFOLK, VA.—Bids probably will be asked in February for erection of the proposed Naval Y. M. C. A. building, to be built in Norfolk, at a cost of $300,000. Louis E. Jallade is Arch., 96 Fifth Ave., New York, N. Y.

The Virginia Fireproof Warehouse Corporation has been chartered with $200,000 capital stock to erect a 4-story concrete-and-brick bonded warehouse, for which plans have been prepared by Breese & Mitchell. John L. Farant is Pres.; W. T. Ham, Vice-Pres.; Julian Osborne, Secy.-Treas.

GREENBORO, N. C.—It is reported that plans have been prepared for an annex to be erected to the Gulford Hotel at a cost of $100,000. B. H. Merrimon is interested.

ATLANTA, GA.—Plans have been prepared by Morgan & Dillon, Archs., Prudential Bldg., for a business building for the Atlanta, Birmingham & Atlantic R. R. Co. Estimated cost, $200,000. Alexander Bannyman is the Ch. Engr., Oglethorpe, Ga.

The Transportation Club will erect a club building, at a cost of $65,000.

SHREVEPORT, LA.—The Commercial National Bank of this city will erect an 8-story building on site yet to be selected. The cost will be over $150,000. Pete Youree is Pres., Shreveport, La.

LOUISVILLE, KY.—C. A. Curtin, Arch., Columbia Bldg., has permit for erection of the annex to the city hall. The cost is placed at about $160,000.

CLEVELAND, OHIO.—W. P. Ginther, of Akron, it is reported, has prepared plans for a $200,000 church to be erected by the St. Elizabeth Roman Catholic Parish.

CLEVELAND, OHIO.—It is reported that the Board of Education intends erecting several schools next year, at a total cost of $810,000. The buildings include Technical High School, $350,000; East End High School, $250,000; Brandon School, $70,000; school, Gilbert District, $60,000; annex, Rice School, $40,000; school, Harvard District, $40,000.

It is reported that plans have been prepared by W. P. Ginther, Arch., Arcade Bldg., Akron, Ohio, for a church, to be erected by the St. Elizabeth's Roman Catholic Parish. Cost, $250,000.

Plans for the proposed new Technical High School at Scoville Ave., S. E., and East 55th St., are being considered by the members of the Board of Education Com. on New Bldgs.

CHICAGO, ILL.—Worthmann & Steinbach, 625 West Chicago Ave., are preparing plans for a school building, to be erected at Noble and Bradley Sts., for St. Stanislaus congregation. To be four stories high, 90x230 ft., built of press brick, with stone trimmings, gravel roof, oak finish, maple floors and nickel plumbing. Estimated cost, $200,000.

The Chicago & Northwestern Ry. Co. will build a $2,000,000 station west of the Chicago River, if the ordinance permitting it to do so is signed by the Mayor. The ordinance calls for the completion of the station by 1912. E. C. Carter is Ch. Engr., Chicago.

CEDAR FALLS, IA.—Proudfoot & Bird, Archs., are preparing plans for a library at Cedar Falls. It will be 4-story brick building with stone trimmings, 44x48 ft., fireproof, steam heat, fan system of ventilation, electric lights, gas. Cost, $150,000.

MINNEAPOLIS, MINN.—The contract to erect the Central Union Telephone Co.'s building at Meridian and New York Sts., it is reported, has been awarded to the WESTLAKE CONSTRUCTION CO., Mercantile Bldg., St. Louis, Mo., at about $400,000.

SHERIDAN, WYO.—The United States has purchased site on the corner of Gould and Loucks Sts., upon which to erect the $175,000 federal building to be located here.

HOUSTON, TEX.—The contract to erect the St. Paul Methodist Church at Milam St. and McGowan Ave. is reported to have been awarded to J. W. SLAUGHTER CONSTRUCTION CO. and THEO. BEILHARZ, jointly, of Dallas, Tex., at an approximate cost of $175,000.

OKLAHOMA, OKLA.—The Board of Education is said to be contemplating erection of a high school at a cost of $150,000, and also two ward buildings.

DENVER, COLO.—Erection of a $600,000 office block opposite the Equitable Bldg. will be begun shortly by the executors of the Stratton Estate.

SEATTLE, WASH.—The plans and specifications for construction of the New Washington Hotel have been filed with the Building Inspector. The new building will be 13 stories high and is located at 1900 to 1912 Second Ave., and will cost $650,000. It is to be built by the New Washington Improvement Co., the JAMES BLACK MASONRY & CONTRACTING CO. being the architects and contractors.

LOS ANGELES, CAL.—The Vranken-Hunter Realty Co., it is stated, has secured a site at Seventh and Hill Sts., on which it is proposed erecting a 10-story steel fireproof building, costing about $250,000.

At the southwest corner of Main and Sixth Sts., opposite the entrance to the Pacific Electric depot, a 10-story building will be erected immediately at an approximate cost of $650,000. The plans have been prepared by Parkinson & Bergstrom, Brady Block, and show an attractive structure. The building will have a steel frame and a decorative facing of pressed brick. On the ground floor will be stores and offices and the upper floors will be devoted exclusively to office purposes. It is expected that the work of excavation will begin immediately.

OAKLAND, CAL.—The Masons will, it is stated, erect a structure on the corner of 15th and Madison Sts., to cost about $200,000.

SAN FRANCISCO, CAL.—The Sheldon Estate has applied to the Board of Works for a permit to erect an 8-story reinforced concrete building on the southeast corner of Market and First Sts. The structure will be devoted to stores and offices and will cost $140,000.

Charles E. Green has purchased site on Post St., between Powell and Stockton Sts, and will erect a handsome 6-story building. Its dimensions will be 75x137 ft. Mr. Green intends to build an office building for the use of doctors and dentists, and it is to be modern in every respect. The structure is to cost $300,000.

A 5-story brick business building is to be erected on the site of the old Grand Opera House on Mission St., near Third, by the Heyman-Weil Co. The building, the work on which will be begun immediately, will cost $400,000. Albert Pissis is Arch.

A. Legallet has made application to the Board of Works for a permit to erect a 6-story reinforced concrete building at the northwest corner of Battery and Jackson Sts., to cost $125,000.

SAN FRANCISCO, CAL. — The Fourth Street Improvement Co. has decided to erect a 3-story hotel building on the northeast corner of Fourth and Howard Sts., which will be called the Royal House. The structure will be of reinforced concrete and will contain ten stores on the ground floor and 200 rooms on the upper floors. There will be two entrances provided for the hotel, one from Howard St. and one from Fourth St. meeting in the center of the building, where they will form a spacious lobby. The building will cover the corner lot, 85x125 ft. and an L, 50x160 ft. to Tehama St., and will cost more than $135,000.

WINNIPEG, MAN.—The Fairchild Implement Co. will erect a large block here at a cost of $110,000.

The T. Eaton Co. has purchased an additional 100 ft. behind its building and will erect thereon a 6-story addition with a frontage on Hargreave and Donald Sts. A. A. Gilroy is Mgr.

EDMONTON, ALTA.—The Mayor has announced that plans are now being prepared at Ottawa for the new postoffice building to be erected here in the spring. Estimated cost, $235,000. Fred Gelinas is Secy. of the Dept. of Public Works, Ottawa, Ont.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

LAWRENCE, MASS.—The Committee on Water-works has awarded contract for 1,000 ft. of cast-iron pipe to the R. D. WOOD CO., at $33.80 per ton.

BUFFALO, N. Y.—The Board of Councilmen has directed Francis G. Ward, Comr. Pub. Wks., to prepare plans and advertise for bids for the construction of a high service water tower, to be erected in Kensington high service district.

JAMESTOWN, N. Y.—Contract has been let to CORRIGAN & MAHONEY for constructing reservoir to supply water and power for fire protection at the County Farm, Dewittville. Cost, $6,000.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Jan. 16, by John H. O'Brien, Comr. of Water Supply, Gas and Electricity, for furnishing and delivering double nozzle standard New York hydrants, repair parts for the same and lead-lined elbows.

BOGOTA (Hackensack post-office), N. J.—Bids are asked until 8 p. m., Feb. 12, for macadamizing, laying curb, gutter and flag-walks on South St., Park Pl., Homestead Pl., Grove St., Larch Ave. and Elm Ave. Peter F. Hopper is Chn. St. Com. (Advertised, Engineering News).

NEW YORK, N. Y.—The following bids were received on Jan. 8, by John F. Cowan, Pres. Aqueduct Comrs., for flashboard equipment for the new Croton dam: Louis Wechster, 1135 Broadway, $34,380; Culgin-Pace Construction Co., 787 Tremont Ave., $47,400; New Jersey Foundry & Machine Co., 9 Murray St., $28,773; Snare & Triest Co., 143 Liberty St., $30,800; Caldwell, Wilcox & Co., Poughkeepsie, N. Y., $34,881; Monad Engineering Co., 147 Cedar St., $35,860; Greenburg & Bartlett, 114 East 23d St., $23,220.

TRENTON, N. J.—MARCUS S. WRIGHT, of South River, has been awarded contract for water supply system for the State Sanitarium for Tuberculosis Diseases, at Glen Gardner, for $13,919.

NORTON, VA.—Bids are asked by the town for the construction of water supply system. L. Lyon is Mayor.

ASHEVILLE, N. C.—The contract has been let to the FARAGHER ENGINEERING CO., of Cleveland, Ohio, for a 5,000,000-gallon water storage reservoir, and work of construction will begin early in the spring. The reservoir will be located at the site of the old city rock quarry on the mountain east of the city, and will be constructed of reinforced concrete. Cost, $50,000.

COVINGTON, GA.—It is reported that a system of water-works will be constructed this year. L. A. Clark is Mayor.

WACO, GA.—FREDERICK MINSHELL, Abbeville, S. C., has the contract, at $4,825, for the following work on the U. S. target range, at Waco: Construction of pump-house, installation of boiler, tools, etc., installation of deep well, erecting iron tank and trestle and installing water main.

NATCHEZ, MISS.—The Natchez Water Commissioners have decided to construct a new reservoir. Cost, $2[illegible]. Krumbhaar & Aiken, of New Orleans, [illegible] are Engrs.

GARY, IND.—Plans, specifications and bidding sheet for construction of proposed water tunnel and inlet as advertised in Engineering News, are on file at the Engineering News, New York. Bids are asked until Jan. 15.

TIPTON (Duncan post-office), IND.—Bids are asked until Jan. 15 by County Engineer for the construction in Township of 1,320 ft. of open ditch and a number of branches to be tiled with 10- to 12-in. tile.

JUNEAU, WIS.—Bids are asked until 8 p. m., Jan. 18, for cast-iron pipe, valves and hydrants and the drilling of a 10-in. well 300 to 700 ft. deep. M. [illegible]eck is Mayor; W. G. Kirchoffer is Engr., Madison, Wis.

MARSHFIELD, WIS.—Bids are asked until 8 p. m., Jan. 19, for [illegible]-gallon high lift centrifugal pump and [illegible]-HP. induction motor to be used in connection with improvements to the water-works system. O. L. Dorschel is Supt., Marshfield; W. G. Kirchoffer is Engr., Madison, Wis.

MARSHFIELD, WIS.—Contract for substation at the water-works plant has been let to JOHN SCHLEGEL, of Marshfield, and the contract for drilling 16 wells has been given to B. I. BAILEY & SON, of Hillsboro, Wis. The supply is expected to exceed 700,000 gallons daily. The proposed plans have been approved by the State Board of Health.

CARROLL, IOWA.—THE COOK CONSTRUCTION CO., of Des Moines, has been awarded the contract for digging the Carroll and Greene county ditch at 12⅝ cts. per cu. yd.

SIOUX CITY, IOWA.—It is reported that the Board of Public Works will purchase a new pump to cost $50,000 for the Main St. pumping station. J. M. Lewis is City Engr.

MARSHALLTOWN, IOWA.—The Water-Works Commissioners contemplate extending water mains in the spring, for which water pipe will be required.

WELLINGTON, KAN.—Bids will be asked in the spring for improvements to water-works. Cost, $30,000. Also electric light plant to cost $10,000. A. B. Cheever is City Clk.

WILLISTON, N. DAK.—Bids are asked by the United States Reclamation Service until 10 A. M., March 5, for the construction of canals and ditches involving the excavation of about 420,000 cu. yds. of earth and furnishing labor and material for a pumping station and various structures requiring about 120,000 ft. B. M. of lumber, about 1,300 cu. yds. of concrete and 10,000 lbs. of structural steel, in connection with the Buford-Trenton project. H. A. Stoors is Elec. Engr., Williston, N. Dak. (Advertised, Engineering News).

GUERNSEY, WYO.—Site has been selected for the big dam at the Narrows, one mile above here. Bed rock has been located at a depth of 80 ft. The dam will be a combination of stone piling and cement, and will extend the full length of the Narrows, which is from 500 to 600 ft.

GLENDIVE, MONT.—A Board of Consulting Engineers of the Reclamation Service which recently convened at Glendive, to open proposals for laterals and waste ditches, Lower Yellowstone irrigation project, Mont. and N. Dak., received only one proposal and that for a part of the work only. The work involves the construction of about 74 miles of laterals, and 34 miles of waste ditches near Glendive, and calls for the excavation of about 500,000 cu. yds. of earth and the furnishing of such material and doing such other work as may be necessary for the completion of the work. The bid received was that of C. J. Murphy, Glendive, for about 48 miles of laterals and 15 miles of waste ditches. The price named was $91,454.

CLINTON, MO.—Bids are asked by the City Clerk to construct the municipal water plant, according to plans and specifications submitted by the civil engineers.

EXCELSIOR SPRINGS, MO.—The Excelsior Water Co. has been incorporated with a capital of $1,500,000 to construct a water-works system here. Dr. W. A. Bell, T. J. Fisher, L. E. J. Lundstrom and W. W. Postlethwaite are interested.

SAN ANTONIO, TEX.—The San Antonio Water Supply Co., capital $2,500,000, has been chartered here. It is proposed to acquire, construct, maintain and operate a system of water-works in the city of San Antonio. Incorporators: S. G. Newton, W. F. Ezelle, M. F. Baker, H. Young, J. S. McNeal, M. F. Collins and M. B. Hamilton, all of San Antonio.

FORT FLAGLER, WASH.—Bids are asked until 11 a. m., Jan. 16, by H. G. Millar, Const. Q. M., U. S. A., for installing two fire hydrants and necessary extension of pipe line for same, at Fort Flagler, Wash.

TACOMA, WASH.—Bids are asked until 11 a. m., Jan. 10, by Owen Woods, Comr. Pub. Wks., for construction of water mains in McKinley, Votaw's and Tacoma Land Co.'s first additions in Local Improvement District No. 507, according to plans and specifications on file in the office of the Commissioner. Amount of bond required same as contract price. Work is to be commenced within 30 days after signing contract and completed within 180 days. Demurrage after 180 days.

TACOMA, WASH.—The contract for furnishing an air-lift pumping plant has been awarded to CALDWELL BROS., Seattle, for $14,877. The Puget Sound Metal Works, Tacoma, bid $14,900, and James Sweigard, Philadelphia, Pa., $28,925.

SAN FRANCISCO, CAL.—Bids are asked until 11 a. m., Jan. 12, by Capt. B. F. Cheatham, Constr. Q. M., 1086 North Point St., for furnishing all materials and labor and constructing a 25-ft. addition to present pump-house, installing 40-HP. boiler, boiler feed

pump and fittings, resetting and connecting 23-HP. Scotch boiler and connecting same to 10-HP. vertical boiler, at Fort Miley, Cal.

NORTH CUCAMONGA, CAL.—The Southern California Mfg. & Improvement Co. has filed articles of incorporation with a capital of $100,000. The company is incorporated by George W. Baird and others in North Cucamonga to supply this town with water.

BOISE, IDAHO.—The contract has been let to JOSEPH PERRAULT and A. B. CRUZEN to supply water for the city of Boise for domestic, sanitary, manufacturing and irrigation purposes.

BOISE, IDAHO.—On Dec. 20 the City Council granted a 50-yr. franchise to A. R. Cruger and Joseph Perault to use streets and alleys for pipes for water. Primary object being to distribute ditch water for irrigating lawns, etc., and ultimate object being to supply water for domestic purposes, etc. A. J. Wylie is Engr.

FORT WILLIAM, ONT.—We are officially advised that bids have been opened varying from $135,000 to $190,000 for Sec. 3 of the Loch Lomond water supply, and consists almost entirely of a 4,500-ft. tunnel and 500 ft. of 36-in. intake pipe. Award of contract has been postponed until Jan. 14.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

NIAGARA FALLS, N. Y.—CHARLES T. SHEPARD, of this city, has been awarded three contracts for constructing a water and sewer system at several points throughout the city amounting to about $8,111.

NEW YORK, N. Y.—Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, Jan. 22, for constructing a system of sewers and appurtenances in sewerage district No. 6A, Arrochar Watershed, Fourth Ward, Boro. of Richmond. (Advertised, Engineering News.)

WEST SENECA, N. Y.—The SAVAGE CO., of Buffalo, has been awarded contract for installing a system of sewers, a pumping plant and a disposal works in this village. The company's bid was $172,874.

TRENTON, N. J.—The City Council has passed ordinances for constructing sewers in Ferrier, New York and Girard Aves. C. C. Haven is City Engr.

NORRISTOWN, PA.—Bids are asked until 8 p. m., Jan. 30, by Charles C. Rambo, Chn. Sewer Com., for the construction complete, including pipe, castings and everything necessary for the construction of an 8-in. vitrified pipe sewer on Beech St., between Swede St. and Porter Alley. Sewers 500 ft. long with the necessary house laterals ending with a double "Y" at the curb line and with lamp holes, manholes and flush tanks complete. Also, to furnish everything for the complete construction of a double 8-in. vitrified sanitary sewer on each sidewalk of DeKalb St., between Brown and Logan Sts., with the necessary lamp holes, manholes, flush tanks and "Ys" for house connections. Each sewer will be about 1,250 ft. long; ten manholes; two lamp holes, and two flush tanks. S. Cameron Corson is Boro. Engr.

McKEES ROCKS, PA.—Bids are asked until 8.30 p. m., Jan. 14, for laying sewers in Holmes, Wright and Rosamond Sts. with all necessary manholes, sewer drops, etc. J. P. Gillen is Boro. Clk. S. L. Gardner is Boro. Engr.

BALTIMORE, MD.—Plans for construction of Outfall Sewer, Section 4, Baltimore, are on file at the office of Engineering News, New York. We are officially advised that this sewer will be about five miles long, and will be divided into sections of about 3,000 ft. each. Bidders may bid on a single section or on the complete sewer. The inside measurement of the sewer is to be 12¼ × 11 ft. Calvin W. Hendrick is Ch. Engr., Sewerage Comn., American Bldg., Baltimore.

RICHMOND, VA.—Bids are asked until 4 p. m., Jan. 15, for constructing a 7-ft. clear sewer across and under the canal of the Chesapeake & Ohio Ry. Co., near the Tredegar Works. The time of completion is to be distinctly given in each bid. (Advertised, Engineering News.)

ORANGEBURG, S. C.—Specifications and bidding sheet for construction of proposed sewer system for this city, as advertised in Engineering News, are on file at the New York office. Bids are to be received until Jan. 23.

PELHAM, GA.—H. S. Jaudon, of Savannah, Ga., and Ludwig & Co., Atlanta, Ga., have been selected as consulting engineers on the electric light plant, water-works, sewerage and ice plant to be constructed by the city.

LOCKLAND, OHIO.—The contract for new sewer system has been awarded to H. A. STRAUSS, Wheeling, W. Va.

CLEVELAND HEIGHTS, OHIO.—J. Nickel was low bidder for laying sewers in Stratford Road, at $6,189. The Waterworks Construction Co. bid $6,226; Alexander Tubman, $6,524, and J. Winterbottom, $8,149.

CANTON, OHIO.—It is reported that a sanitary sewer will be constructed in Schwalu St. W. E. Sarver is City Engr.

CINCINNATI, OHIO.—Bids are asked until noon, Jan. 24, by the Board of Public Service for constructing sewer in ravine west of Morrison St. Estimated quantities: 320 lin. ft. of 2½-ft. brick sewer and 1,520 lin. ft. of 12, 18 and 21-in. pipe sewer. Average cut, 12 ft. Cost, about $9,388. Also for building 2,325 ft. of 12, 18 and 21-in. pipe sewer in White St. Average cut, 10 ft. Estimated cost, $8,557. M. J. Keefe, Clk. Bd. Public Service.

Bids are asked until noon, Jan. 25, by the Board of Public Service, for constructing sewers in Glenway and Winfield Sts. and Midland Ave., aggregating about 3,782 ft. of 12, 15, 18, 21 and 24-in. pipe sewers. Average cut, 14 ft. Estimated cost, $12,848.

TERRE HAUTE, IND.—The Board of Public Works has awarded the contract to WILLIAM J. ERLER, 319 Swan St., for the construction of sewer in North Sixth St.

EVANSVILLE, IND.—It is reported that plans are being drawn for new sewers in Kentucky Ave.

INDIANAPOLIS, IND.—The contract has been awarded to HENRY MAAG for the construction of the North Indianapolis sewer of reinforced concrete. The sewer will drain that part of the city between Fall Creek and 38th St., and Annette St. and the canal.

LANSING, MICH.—We are officially advised that the city will construct a system of pipe sewers. Estimated cost, $12,269. H. A. Collar is City Engr.

PORT HURON, MICH.—The Board of Public Works will soon ask for bids to construct 300 ft. of sewerage extension. R. D. O'Keefe is Supt. Bd. Pub Wks.

QUINCY, ILL.—It is reported that five miles of sewers will be constructed here in the spring. F. L. Hancock is City Engr.

ROBINSON, ILL.—J. A. DUNKEL, of Tuscola, has been awarded contract for new sewer system here.

BURLINGTON, IOWA.—Plans, specifications and bidding sheet are on file at the office of Engineering News, New York, for constructing vitrified pipe sewer known as the Locust St. sewer and branches. Bids are asked until 4 p. m., March 18. J. F. Winters is City Engr.

DES MOINES, IOWA.—Bids are asked by Board of Public Works until 11 a. m., Jan. 21, for laying a 30-in. vitrified clay pipe sewer from center of Ninth and Thompson Sts. to a junction with the east side intercepting sewer in Pennsylvania Ave., and about 1,364 lineal ft. of sewer. George D. Dobson is City Engr.

DES MOINES, IOWA.—Bids are asked until Jan. 21, by the Board of Public Works, for constructing a 30-in. vitrified clay pipe sewer and appurtenances in Ninth and Thompson Sts. George D. Dobson is City Engr.

ST. PETER, MINN.—DOYLE & WEBSTER, St. Cloud, have been awarded contract for constructing new sewer, to cost about $11,000.

DULUTH, MINN.—It is reported that new sewers are to be constructed in Jefferson and other streets. W. S. McCormick is City Controller.

HIBBING, MINN.—The contract for constructing new sewer system has been awarded to P. McDONNELL, 124 West Superior St. The other bidders were J. J. Donegan, Shenandoah, Iowa; D. R. Harding, Racine, Wis., and E. J. Rasmussen & Co., Oshkosh, Wis.

ST. PAUL, MINN.—The contract has been awarded to RYAN & JOHNSON for storm water sewer in Otto Ave., from Canton St. to the Mississippi River, for $4,770. L. E. Rundlett is City Engr.

HORTON, KAN.—It is reported that bids will be asked for constructing lateral sewers. B. B. Norris is City Clerk.

HORTON, KAN.—The contract comprising the main sewer district has been let to T. W. ROBERTS, Independence, Mo., for $5,380.

OMAHA, NEB.—It is reported that during the year $1,000,000 will be spent for sewers and other public improvements. Andrew Rosewater is City Engr.

OKLAHOMA CITY, OKLA.—Plans have been prepared for a new sewer district located west of Laird Ave. Estimated cost, $35,000. W. C. Burke is City Engr.

COLFAX, WASH.—The City Council has decided to construct sewers on Railroad Ave., Last and Main Sts.

ABERDEEN, WASH.—Plans are being prepared for about six miles of sewers. Bids will be asked some time in February. H. W. Troutman is City Engr.

BISBEE, ARIZ.—Plans, specifications and bidding sheet for proposed sewer system at Bisbee, as advertised, are on file at the office of Engineering News, New York. Bids are asked until Jan. 15.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

ALBANY, N. Y.—We are officially advised that bids will be asked about Jan. 15 for paving South Lansing and Tennis Sts. with vitrified blocks. Estimate cost, $15,230. Bids will also be asked for grading and constructing sidewalks, curbs and sewers. Walter Melius is City Engr.

NEW YORK, N. Y.—It is reported that the Pennsylvania R. R. and McAdoo interests purpose widening 32d St. between Sixth and Seventh Aves., to full 100 ft. in width. The carrying out of the idea would mean the contraction of the proposed width of the McAdoo terminal building at Sixth Ave. between 32d and 33d Sts.

SOMERVILLE, N. J.—Bids are asked until 10 a. m., Feb. 5, for macadamizing 3.14 miles of road in Branchburgh Township, leading from the North Branch Iron Bridge, westerly to the Hunterdon County line, and a spur from North Branch to C. R. R. station. (Advertised, Engineering News.)

DOYLESTOWN, PA.—J. R. Shanley, Arcade Bldg., Philadelphia, is low bidder for the construction of 18,065 ft. of road in Bristol Township at $28,180.

LAPLUME, PA.—Application for state aid has been made for rebuilding 6,600 ft. of road, from Factoryville to the Laplume borough line.

SHAMOKIN, PA.—D. J. RODGERS, of Danville, Ill., has been awarded the contract for the paving in this city.

PORTSMOUTH, VA.—All bids recently received for paving Middle St. with vitrified brick have been rejected, and new bids will be received. Bascom Sykes is City Engr.

MOBILE, ALA.—CAFYEN & CARTER, Rochester, N. Y., have been awarded contract at $26,765 for the wooden block pavement on Dauphen St. from Claiborne to Julia Sts.

MONTGOMERY, ALA.—Bids are asked until Jan. 21 for grading various streets with hexagon block or Schillinger pavement. R. S. Williams is City Treas.

RAYNE, LA.—R. B. Boettcher, City Engr., states that T. H. BIGLER CONSTRUCTION CO., of Bessemer, Ala., has secured the contract for 7,000 lin. ft. brick curb at 48 cts. per lin. ft., and 4,000 sq. ft. of cement sidewalk at 19½ cts. per ft. Bids were opened Dec. 22.

CHATTANOOGA, TENN.— A resolution authorizing the mayor and aldermen to raise funds amounting to $28,242 for paving of Rossville Ave. has passed its final reading in the Upper Board of the City Council. It had passed the Lower Board at the previous meeting.

LOUISVILLE, KY.—L. R. FIGG, G. W. GOSNELL and the HENRY BICKEL CO. have been awarded contracts for the construction of 13 blocks of granitoid sidewalks.

The Board of Public Works has awarded contract to the HENRY BICKEL CO. for grading Grand Ave., from 26th to 28th St.

AKRON, OHIO.—Cuyahoga St. will be paved at an estimated cost of from $36,000 to $44,000, and walks will be laid costing about $10,000. The City Engineer has prepared the plans and specifications. Nicholas Reid is Chn. St. Com.

BUCYRUS, OHIO.—The improvement of Galion St. by paving with brick or asphalt will be one of the first improvements for the early spring.

ASHTABULA, OHIO.—The Council has decided to pave the Spring St. Viaduct with creosote block. The pavement is to be laid on a foundation of 3-in. creosoted Georgia pine and the paving on top is to be with block.

CINCINNATI, OHIO.—The contract for improving Clason St. and Stewart Ave. has been awarded to W. H. SETTLE & CO., Madisonville, Ohio.

CINCINNATI, OHIO.—Bids are asked until Jan. 25 by the Board County Commissioners for paving slopes on west approach to Elizabethtown Bridge, Whitewater Township.

INDIANAPOLIS, IND.—The Board of Public Works is reported to have passed a resolution providing for grading and constructing cement walks on Ewing St.

CLINTON, IND.—Commissioners of Vermillion County will soon ask for bids for the construction of 37 miles of gravel road in Clinton Township.

FORT WAYNE, IND.—Plans and specifications are being prepared for paving certain portions of Washington and other streets and avenues. Frank D. Randall is City Eng.

BLUFFTON, IND.—Bids will be asked early in the spring for paving Cherry and South Sts. with asphalt, twelve squares, 24 ft. wide; also for about three miles of cement walks. Twelve miles more will be laid during the summer. E. G. Elliott is City Clk.

COLUMBUS, IND.—The City Council has ordered plans and specifications and will soon ask for bids for paving Franklin St. with asphalt. W. H. Right is City Engr.

HASTINGS, MICH.—The city proposes to spend $35,000 for paving some of its business streets.

DETROIT, MICH.—The estimated cost of widening Washington Boulevard and opening Howard St. will be $250,000. Estimates have been prepared for repairing eleven streets and parks and resurfacing twenty-one thoroughfares on the west side. Various materials are to be used. J. J. Haarer is Comr. of Public Works.

CHICAGO, ILL.—Bids are asked until noon Jan. 23, by Col. Henry S. Dietrich, General Inspector of Rifle Practice, I. N. G., room 29, 90 La Salle St., for the construction of 4,000 lin. ft., more or less, of 4-ft. cement walk on the rifle range, at Camp Logan. Thos. W. Scott, adjutant general; W. Carbys Zimmerman, State Arch., 1101 Steinway Hall, Chicago.

QUINCY, ILL.—This city contemplates laying seven blocks of brick paving, on 6-in. concrete base with sandstone curb, in the spring. John A. Berlin is City Clk.; F. L. Hancock is City Engr.

MOUND CITY, ILL.—It is reported that three miles of cement pavement will be laid in this city at a cost of $5,000. J. G. Trampert is the City Clerk; C. J. Dougherty is City Engr.

CENTERVILLE, IOWA.—About $7,000 will be spent by the city on improvements to streets and roads.

CHERRYVALE, KAN.—This city contemplates construction of about one mile of brick paving. J. Brady is City Clk.

OMAHA, NEB.—The paving bids for the permanent improvement of the Calhoun, Q St. and West Leavenworth roads have been rejected and the commissioners will advertise for new estimates and bids.

KANSAS CITY, MO.—The following contracts have been awarded for constructing artificial stone sidewalks and curbing in sundry streets: 3,250 sq. ft., KNAPP & COUMBE, 612 Massachusetts Bldg., at $15.97 a sq. ft.; 375 sq. ft. J. P. THOMPSON, $17.95; 7,000 sq. ft., HORSMAN CONST. CO., $14.70; 5,500 sq. ft., S. J. ARMSTRONG, $14.40; 2,500 sq. ft., S. J. ARMSTRONG, $14.40; 1,200 sq. ft., T. P. THOMSON, $15; 5,000 sq. ft., T. P. THOMSON, $14.75; 5,000 sq. ft. MISSOURI SIDEWALK CO., $15.20; 1,900 sq. ft., J. E. WELSH, $14.49; 1,200 sq. ft., T. P. THOMSON, $13.34; 750 sq. ft., KNAPP & COUMBE, $16.37. E. A. Harper is City Engr.

LITTLE ROCK, ARK.—The commissioners for the West Ninth St. improvement district will meet this week for the purpose of completing plans for its improvement. The street will be paved and guttered from Main St. to Battery St. The estimated cost is $35,000 to $40,000.

About $12,000 will be expended in improving East Ninth St.

LANCASTER, OHIO.—Plans are being prepared for paving Chestnut St. at a cost of about $15,000. B. B. Shell is City Clerk.

GRAND JUNCTION, COLO.—The Standard Gilsonite Asphalting Paving Co. has been incorporated at $50,000 by John E. Baggott and associates of Grand Junction, Colo.

RAYMOND, WASH.—Contract has been awarded for building the Raymond County Road to W. R. GRAY. The contract price is $8,000 and includes about one mile of trestle and a drawbridge over Ellis slough.

SPOKANE, WASH.—Contract for construction of 11,000 sq. yds. of cement sidewalks in South Side Cable addition has been let by the Kiernan Land Co., owners of the addition. The sidewalks will be of cement, laid on 6 ins. of sand and gravel and will be 5 ft. wide. J. H. McALLISTER was awarded the contract. The price for the work is $12,320.

CORVALLIS, ORE.—Bids have been withdrawn until Mar. 1 by the Committee on Streets and Public Buildings for improving 14th, Center, Depot, Oak, Adams, Tenth and Van Buren Sts.

LOS ANGELES, CAL.—Bids for constructing boulevard from Los Angeles to Pasadena have been received by the Board of Supervisors, as follows: M. T. French, grading and ditching, $13,395; also cement curbing, $687. James M. Montgomery, grading and ditching, $11,625. S. Hutton & Sons, lowest bid for paving, $16,800. The Mercereau Bridge & Construction Co., lowest bid for culvert, $2,705. The total lowest bids for grading, petrolithic paving and culverts, without curbing, $31,130.

WINNIPEG, MAN.—The city council has passed estimates for the following asphalt pavements: Higgins St., $14,823; Selkirk Ave., $42,758; Sargeant Ave., $30,643; Notre Dame Ave., $191,780; Corydon Ave., $64,696. H. N. Ruttan is City Engr.; J. H. Ashdown is Mayor.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

BOSTON, MASS.—We are officially advised that Fiske & Co., Inc., 161 Devonshire St., Boston, and Fuller Bldg., New York, are having plans prepared for improving the plant with a steel building, fireproof throughout, the yearly output of the plant to be 25,000,000 brick.

FALL RIVER, MASS.—As soon as plans are completed work will begin on construction of mill of the American Thread Co. It will be built to the east of the present Kerr mill, on the opposite side of Kerr St., and will be practically an extension of the present structure. Surveyors have already staked out the site. The plans calls for a 5-story brick mill, and it is expected that work will be started within three or four weeks at the latest. It is understood that the machinery was ordered some time ago, and there will be no delay in delivery when the walls are ready. Plans are now being prepared by Samuel S. Greene, of Holyoke, Mass., the official architect and civil engineer of the American Thread Co. When completed the mill will employ about 600 or 700 additional hands, the present structure employing about 1,100 hands. Howard & Bullough machinery will be installed.

BINGHAMTON, N. Y.—A new 5-story factory will be erected on Water St. by F. B. Richards & Co., manufacturers of cigars. Cost, about $25,000.

POUGHKEEPSIE, N. Y.—We are officially advised that W. S. Barstow & Co., 56 Pine St., New York, have been retained as consulting engineers for construction of the new plant of the Seneca Button Co., at Poughkeepsie, N. Y., which is to be operated electrically throughout.

ALBANY, N. Y.—We have been officially informed that the CLEMENCE CONSTRUCTION CO., Syracuse, N. Y., has secured contract for main work, carpenter work, roofing, construction of concrete and steel beam floors, for the shirt factory being built for Hall, Hartwell & Co. Edward W. Loth is Arch., 253 Broadway, Troy, N. Y. The building will be 64x140 ft., will have three stories and basement and will cost $46,000.

DOVER, N. J.—The War Department will erect a powder factory. Congress has appropriated $165,000. No architect or designing engineer is employed in connection with this work. Brig.-Gen. William Crozier is Ch. of Ordnance, U. S. A. War Dept., Washington, D. C.

MONESSEN, PA.—The Pittsburg Steel Co. has bought a site for a large addition to be erected at a cost of $200,000. George Nash is Supt.

PITTSBURG, PA. — The following improvements and enlargements to various plants of the U. S. Steel Corporation are planned for this season.

At the Newburg mills there will be erected a new mill for rolling flats for cold rolling. At the Central furnace there will be installed a new power plant. At New Philadelphia there will be erected a new sheet mill and a reconstruction of the old mill. A new jobbing mill also will be erected. It is the intention to double the capacity of the mill of the Lorain Steel Co., located at Johnstown, Pa. The other changes cover the developments in the Youngstown and Pittsburg territory. The statement is made that the improvements to the American Steel & Wire Co., Cleveland, will cost over $1,000,000, although no estimate of cost has been included in the statement issued by the Steel Corporation. The other important changes are as follows:

Carnegie Steel Co.—At the Ohio Works at Youngstown, two new blast furnaces; twelve open-hearth furnaces, blooming mill and bar mills of sufficient capacity to finish the product of the open-hearth plant; new mold foundry.

At the Clairton (Pa.) Works.—New 14-in structural mill, new 22-in. structural mill, one 1,000-KW. generator with gas engine.

At the Duquesne Works, Cochran, Pa.—New 16-in. merchant bar mill, new electric power station.

At Bellaire (Ohio) Works.—New river pumping plant.

Indiana Steel Co.—Commencing work at

Gary on the second group of four blast furnaces, 28 open-hearth furnaces, blooming and slabbing mills and other finishing mills necessary to handle the steel produced.

Illinois Steel Co.—The construction of two 250-ton mixers for the Bessemer department, South Chicago, new 40,000,000-gallon pumping engine.

The National Tube Co., Lorain Works.—The construction of a blast furnace and six open-hearth furnaces, new galvanizing pant.

American Steel & Wire Co.—The building of a factory for the manufacture of insulating wire and cable at the Waukegan Works; new rod mills at Worcester, Mass.

PETERSBURG, VA.—American Cigar Co. has awarded contract to MANKIN CONSTRUCTION CO., Richmond, Va., for erection of factory building, three stories high with basement, 170x55 ft., having mill construction, steam heating, electric-lighting fixtures, electric elevators, two boilers. Estimated cost, $55,000. Main offices of the American Cigar Co. are at 111 Fifth Ave., New York.

FORDWICK, VA.—We are officially advised that the Virginia Portland Cement Co., of Fordwick, is about to add 2,000 barrels per day capacity to its plant. Many improvements will be made in the buildings and machinery. There will be a new power-house, and the existing mill will be driven by electricity. In the power-house two turbines are to be installed, and the boiler capacity will aggregate 2,000 HP. The whole of the old and new machinery will be driven by electricity. W. S. Barstow & Co., 56 Pine St., New York, are Consult. Engrs.

DURHAM, N. C.—The Erwin Cotton Mills, of this city, in connection with extensive improvements which they are making in their plant, have placed an order with the CENTRAL FOUNDRY CO., 116 Nassau St., New York, for seven miles of pipe.

TAYLORVILLE, N. C.—Everhart Lumber Co., recently incorporated with $25,000 capital stock, will manufacture rough and finished pine lumber; daily capacity, 10,000 ft. A packing-box factory will probably be established. C. L. Everhart is Vice-Pres. and Supt., and H. C. Everhart, Secy.-Treas.

COLUMBIA, S. C.—The Irene Cotton Mills, Gaffney, manufacturers of table damasks, are to about double the capacity of the plant and the output of the finished product will be about $100,000 worth more a year. The mill is owned and operated by H. D. Wheat.

JACKSONVILLE, FLA.—The Ide Cotton Mills Co., of this city, is to have an addition which will comprise practically a complete yarn factory of 25,000 spindles. A meeting of the directors is to be held Jan. 14, to increase the capital from $200,000 to $750,000, and to arrange the details of the addition. The company will also erect a large power plant to furnish electricity for the old and the new mill. George P. Ide is the head of this enterprise.

IRONTON, ALA.—The American Cylinder Brace & Mfg. Co., recently organized at West Palm Beach., Fla., with $10,000 capital stock, has secured site at Ironton for the location of plant, and is arranging for the erection of necessary buildings. Wm. Heim, of West Palm Beach, Fla., is Pres., and M. E. Spence, Secy.-Treas.

SHREVEPORT, LA.—It is reported that the Shreveport & Northeastern Ry. Co. has purchased site on which to erect shops and general office buildings. O. K. Clingman, of Homer, La., is Pres.

NASHVILLE, TENN.—At a recent meeting of the stockholders of the Warioto Mills Co. it was voted to issue $200,000 in bonds, the proceeds to be used for equipping the plant with up-to-date machinery.

PADUCAH, KY.—A large copper and tin shop 60x75 ft. will be erected by the Illinois Central R. R. Co. A. S. Baldwin, Chicago, Ill., is Ch. Engr.

ELYRIA, OHIO.—A factory will be erected by the Brown Clutch Co., which has a capital of $4,000,000.

CLEVELAND, OHIO.—A permit has been granted to the Cleveland Twist Drill Co. for the erection of a boiler room, at its plant on Hamilton and East 47th Sts. Cost, $25,000.

PERU, IND.—The Kendallville Furniture Co. has awarded contract for erecting large plant on the site of the plant recently destroyed by fire, to JOHN CLIFTON & SON, of this city. Crapsey & Lamm, Peru, are Archs.

ANDERSON, IND.—Bids are asked immediately by Winter, Mercer & Brannan Co., for building and equipping a modern planing mill, warehouse, etc., on the site of the plant recently destroyed by fire.

BATTLE CREEK, MICH.—It is reported that C. W. Post will build a plant for the manufacture of a new cereal. The plant will include several substantial brick buildings and a power plant of 13,000 HP.

GRAND RAPIDS, MICH.—A 4-story building, 110x147 ft., on Ellsworth Ave., will be erected by Dean-Hicks Co., printers. Harry K. Dean is Mgr.

CHICAGO HEIGHTS, ILL.—The William H. Andrus Co. has awarded a contract to the G. H. FULLER CO., of Chicago Heights, for the construction and equipment of its factory buildings. The works will be located on Lot 4, Block 231, which contains about six acres of land. The main building will be 135 ft. wide and 350 ft. in length, two stories. In addition to this there will be a large boiler and engine house and several other buildings, all of which will be of brick, stone and mill construction.

CHICAGO, ILL.—The Western Thread & Dye Works have built a new plant here. It is constructed of brick throughout, 200x27 ft. and three stories high.

ST. PAUL, MINN.—A 2-story brick factory on Fairfield Ave. will be erected by M. J. O'Neil. Cost, $20,000.

READERS' WANTS FOR THOSE IN THE MARKET

The readers of ENGINEERING NEWS are constantly in the market for great quantities of machinery, tools and general supplies. While our thousand advertisers are usually able to furnish the material desired, yet there are many things wanted by our readers that are not advertised, although connected with engineering and contracting directly or indirectly. This department (R-W) is for this class of inquiries, and we urge our readers to keep us informed. Enclose five cents in stamps and we write to a number of leading manufacturers without further cost. When writing to our advertisers, who are the leaders in their respective lines, mention Engineering News. Have you a copy of our Buyers' Guide? Engineering News Can Help Buyers.

METAL LATH.—Lexington, Ky.—Buford A. Groves, Lexington, Ky., desires information relative to metal lath.

CATALOGUES.—Columbus, O.—The Franklin Engineering Co., 600 Columbus Savings and Trust Bldg., Columbus, O., informs us that it desires trade catalogues, etc.

QUARRY MACHINERY.—Arequipa, Peru.—Julius A. Arce, C. E., P. O. Box 90, Arequipa, Peru, S. A., writes us that he is in the market for quarry machinery.

CONCRETE BLOCK MACHINERY. — Salem, N. J.—Daniel Jones, 317 Kiasby St., Salem, N. J., informs us that he is in the market for concrete block machinery.

ALCOHOL APPARATUS.—Baltimore, Md. —Edward L. Gernand, 211 North Calvert St., Baltimore, Md., desires to communicate with firms manufacturing alcohol in accordance with the new law.

PAINT.—Helena, Mont.—F. D. Jones, C. E., 37 Montana Nat. Bk. Bldg., Helena, Mont., writes us that he desires to purchase a white paint that will stand the action of steam arising from a swimming pool.

ENGINE PUMP AND TANK.—West Seneca, N. Y.—J. J. Lawless, Abbott Road, R. F. D. No. 1, West Seneca, N. Y., informs us that he desires information relative to a pump, engine and tank for water supply in a country house. Would prefer pressure tank installed in cellar.

BRICK, CONCRETE WORK, HOISTS, ETC.—Philadelphia, Pa.—The William Steele & Sons Co., Philadelphia, Pa., writes us that it is in the market for chimney brick, concrete work and hoists.

CONCRETE BLOCK MACHINERY.—CHINERY.—English, Ont.—Peckham & Hutton, English, Ont., inform us that they desire catalogues and price lists of concrete block and paving machinery.

WATER - WORKS SUPPLIES. — Red Springs, N. C.—F. F. Wetmore, Red Springs, N. C., writes us that he desires to communicate with firms dealing in water-works supplies, such as pumps, tanks, pipe, etc.

NAILING MACHINERY.—Cassville, N. J.—We are in receipt of a letter from W. C. Vanhise, Cassville, N. J., stating that he desires to purchase a nailing machine to nail the center of cranberry crates as well as the heads.

RELAYING RAILS, SPLICE BARS, NUTS, BOLTS, ETC.—Dallas, Tex.—The R. B. Godley Lumber Co., Dallas, Tex., informs us that it is desirous of purchasing about three miles of 35 or 40-lb. relaying rails, including splice bars, nuts, bolts, etc.

ROAD GRADER.—Huntley, Mont.—George E. Goodwin, Engr. U. S. Reclamation Service, Huntley, Mont., writes us that he is desirous of procuring a heavy road grader, suitable for making small distributing ditches. One which can be drawn by 6 to 12 horses preferred.

DECATUR, ILL.—The Washburn & Wheeler Mfg. Co. have increased their capital from $25,000 to $60,000 and will erect a new plant to cost $10,000.

MINNEAPOLIS, MINN.—A plant, to include a mill, machine shop and warehouse will be erected by the Spencer Kellogg Co., of Buffalo, N. Y., which has purchased a site in Southeast Minneapolis. Estimated cost, $250,000. Spencer Kellogg, Jr., Buffalo, N. Y., is Mgr.

MINNEAPOLIS, MINN.—A 3-story factory at Western Ave. and Ninth St. will be erected by the Schurmeir Wagon Co. on Broadway and Pine Sts., St. Paul, Minn. Cost, $100,000.

SPOKANE, WASH.—J. H. Spear, manager of the Washington Brick, Lime & Mfg. Co., Spokane, and associates, have organized the Island Portland Cement Co. to produce the "Ajax" brand of cement. Company will have capital stock of $2,400,000, and, according to local press reports, will erect the largest and most modern cement plant in the Northwest. Its factory will be located either at Colville, Wash., or Pend d'Oreille Lake, Idaho. Capacity of plant will be 1,500 barrels a day.

Omar Stoppel, a brewer of Cleveland, Ohio, and associates of Spokane, will erect a brewery in this city, costing $200,000. Plant will be most modern; $50,000 will be spent in buildings, and $150,000 in equipment.

Harry E Brokaw, of the firm of Brokaw, Wellman & Co., has purchased a site for a new factory and distributing plant for the company, to be erected at a cost of $15,000, including machinery. Building will be either 2 or 3 story brick.

WHITWORTH, QUE.—Donald Fraser & Sons will rebuild the mill at Whitworth near River du Loup in the spring. The mill's capacity will be 5,000,000 ft. of lumber.

MONTREAL, QUE.—W. S. BARSTOW & CO., 56 Pine St., New York, have been awarded contract to do all the electrical work for an 800,000 barrel cement plant to be located on the outskirts of Montreal, for the Fordwick Co. The works will use about 2,500-HP., and will take current from the Shawinigan power plant, 80 miles from Montreal. The property of the Fordwick Co. is about two miles in length by 600 ft. in width, along the St. Lawrence River. Provision will be made for storing 40,000 tons coal adjacent to the works.

FORT WILLIAM, ONT.—H. G. Brown, representing a syndicate of Montreal capitalists, is negotiating wtih the City Council for concessions for the establishment here of a car-building plant to employ 2,500 hands. Estimated cost, $250,000.

WINNIPEG, MAN.—W. Gray & Co., carriage builders, of Chatham, Ont., have purchased a slite in Winnipeg, and will erect a plant in the spring. Cost, $100,000.

MEDICINE HAT, ALTA.—The E. B. Eddy Co., manufacturers of matches, wooden pails, brooms, etc., Hull, Que., have purchased a site here and will erect a factory to supply the entire Canadian Northwest.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

GRAND STAND.—Toronto, Ont.—The contract for erection of grand stand at Exhibition Park has been let to F. HOLMES, of Toronto, at $216,465.

DITCH.—St. Cloud, Minn.—O. F. DOYLE, of St. Cloud, is reported to have secured the contract for constructing the Crow River Ditch, for about $14,000.

LUMBER BASIN.—Brunswick, Ga.—W. L. MILLER, 19 Milk St., Boston, Mass., has been awarded a contract for building a lumber basin at Brunswick, Ga., to cost $250,000.

TELEPHONE.—Port Hope, Ont.—G. W. Jones and W. H. Burley, of Newtonville, Ont., have been granted a telephone franchise here on behalf of the Rural Farmers' Telephone Co.

TUNNEL.—Kenora, Ont.—GEORGE C. McFARLANE, of Kenora, has the contract for driving one of the big tunnels on the line of the Grand Trunk Pacific Ry.

JETTY.—New York, N. Y.—Bids are asked until 3 p. m., Jan. 24, by the Park Board, for constructing a timber jetty on the beach at Seaside Park, Boro. of Brooklyn. Moses Herrman is Pres. Park Bd.

TELEGRAPH, TELEPHONE SUPPLIES. —New York, N. Y.—Bids are asked by Theodore A. Bingham, Police Comr., until 10 a. m., Jan. 23, for furnishing and delivering telegraph and telephone supplies.

DITCH. — St. James, Minn. — The ST. JAMES TILE MFG. CO., of St. James, is reported to have secured the contract for constructing the underground tile portion of County Ditch No. 4, for $39,998.

PIERS.—Boston, Mass.—GEORGE T. RENDLE, 28 School St., Boston, has been awarded contract for building middle and south piers at South Ferry, Boston, for the City of Boston, to cost about $17,000.

BULKHEAD.—New York, N. Y.—Bids are asked until 3 p. m., Jan. 31, by the Park Board, for repairs and alterations to bulkhead foot of Ocean Parkway, consisting of furnishing and emplacing of 3,500 cu. yds. of boat stone.

DREDGING.—Sault Ste Marie, Ont.—Bids are asked until Jan. 21 by Fred Gelinas, Secy. Dept. Public Works, Ottawa, for dredging the St. Marys River at Sault Ste. Marie. J. G. Sing is Res. Engr., Confederation Life Bldg., Toronto.

TRAVELING CRANE.—West Point, N. Y. —Specifications and bidding sheet for traveling crane to be installed at West Point, as advertised in Engineering News, are on file at office of Engineering News, New York. Bids are asked until Jan. 24.

DITCH. — Breckenridge, Minn. — R. P. Glover, County Audr., advises us that final hearing to establish Ditch No. 6 will be held on Jan. 9. Bids will be asked about Feb. 9. Martin Aalberg is Engr., Henning, Minn. Estimated cost, $23,000.

TELEPHONE LINE.—Quebec, Que.—A franchise has been granted by the city of Quebec to the La Compagnie de Telephone de Bellechasse, of Levis, giving it the right to operate in this city. We are officially advised that nothing will be done before February.

BULKHEAD.—New York, N. Y.—Bids are asked until 11 a. m., Jan. 23, by Bird S. Coler, Pres. Boro. of Brooklyn, for building a temporary bulkhead on the Eighth Ward Market property, between 36th and 38th Sts., Second Ave. and New York Bay, Boro. of Brooklyn.

CANAL.—Ottawa, Ont.—We are officially advised that the Department of Railways and Canals will shortly call for bids for the construction of a canal from Newmarket, Ont., to Hollands Landing, Ont. M. J. Butler is Deputy Minister and Ch. Engr. of the Dept.

SPILLWAY DAM.—San Francisco, Cal—Bids are asked until noon, Feb. 8, for enlarging spillway and building portion of dam known as the Barrier, Yuba River Cal. Major Wm. W. Harts, Engrs., Secy. of California Debris Comn., 1733 Pine St. (Advertised, Engineering News.)

LIGHT-HOUSES, BUOYS, ETC.—Quebec, Que.—The Department of Marine and Fisheries, Ottawa, Ont., has under consideration plans for safeguarding navigation along the St. Lawrence River eastward from Quebec City. The scheme involves the erection of a number of light-houses, buoys, etc. F. Gourdeau is Secy. of the Dept., Ottawa, Ont.

BLASTING.—Portsmouth, [illegible] H.—The Bureau of Yards and Docks, [illegible] ashington, D. C., opened on Jan. 5, bids [illegible] removing by blasting ledge in front [illegible] quay wall, Portsmouth Navy Yard. [illegible] only bid received was that of the [illegible] Co., Boston Mass., at $12,[illegible] ern Dredging

DITCHES.—Webster City, [illegible]a.—Bids are asked until Jan. 16 by [illegible] A. Cragwick, County Audr., for construc[illegible] six ditches, one ditch will be eight m[illegible] long, 159,195 cu. yds.; one 5¼ miles, 88[illegible] cu. yds., and ½ mile 20 to 22-in. drain [illegible] There will also be four other smaller [illegible]hes.

ORDNANCE.—Dover, N[illegible] —Bids are asked until 10 a. m., Feb[illegible] by Major B. W. Dunn, Frankford Arse[illegible] Philadelphia, Pa., for furnishing at the [illegible] S. Powder Depot, Dover, certain s[illegible]ies. Plans, specifications and bidding s[illegible] are on file at office of Engineering Ne[illegible] New York.

GRADING.—Michigan City, [illegible]d.—Contract for 12½ miles of grading w[illegible] of Michigan City, consisting of about [illegible] cu. yds., has been awarded by the S[illegible]th Bend Construction Co., Dean Bldg., [illegible]th Bend, to HANRAHAN & LINDQUIS[illegible] Chamber of Commerce Bldg., Chicago. [illegible]rk is to be completed by June 1. John [illegible] W. Riegle is Ch. Engr.

TUG.—Wasington, D. C.—Bi[illegible] are asked until 2 p. m., Feb. 6, at th[illegible] office of the Treasury Department, Washi[illegible]gton, for construction of an ocean-going tug for the U. S. Revenue-Cutter Service, for service on the North Pacific Coast, to be known while in course of construction or until launched as Revenue Cutter No. 16. J. H. Edwards is Asst. Secy.

TUNNEL ENTRANCE.—Boston, Mass.—Bids were received on Dec. 27, by B. Leighton Beal, Secy. Boston Transit Comn., 15 Beacon St., for constructing an entrance and exit for the Washington St. tunnel, at Franklin St. Contract was awarded to PATRICK McGOVERN, 6 Beacon St., Boston, at $29,087, time of completion, April 1, 1907. List of itemized bids will be given next week under Contract Prices.

DREDGING.—New York, N. Y.—The only bid received on Dec. 28 by Col. A. W. Lockwood, Corps Engrs., U. S. A., for dredging, was submitted by Seely-Taylor Co., 78 Broad St., New York. It bid for Bronx River, 95 cts. per cu. yd. scow measure, for all material except bowlders and ledge rock, and for East Chester Creek, 60 cts. per cu. yd. It bid for bowlders ½ cu. yd. in size or larger, $15 per cu. yd.

TELEPHONE LINE.—Minneapolis, Minn. —In connection with the statement of E. H. Moulton, Pres. of the Tri-State Telephone Co., of Minneapolis, that the company will extend the line 450 miles to Chicago, we are officially informed that nothing will be done in the matter until February. This will make a long-distance connection from Chicago to Glendive, Mont., and materially enlarge the field of telephone service in the West.

SEA WALL.—Boston, Mass.—The following bids were received Jan. 2 for construction of Northern Ave. Sea Wall: W. H. Ellis, 17 Milk St., $40,765; Lawler Bros, Charlestown, $41,000; W. L. Miller, 19 Milk St., $42,874; Cavanaugh Bros., 471 Dorchester Ave., $43,875; Patrick McGovern, 6 Beacon St., $44,920; Hugh Nawn Construction Co., 13 Avon St., $44,960; D. J. Sheehan & Co., $53,665; Bryne Contracting Co., $55,000; Jones & Meehan, 10 Tremont St., $61,460.

SHIP CHANNEL.—Morgan City, La.—The stockholders of the Atchafalaya Bay Ship Channel Co., at City Hall on Dec. 15, received the report of W. B. Reed, Engr., New Orleans, who made the recent survey of the route. He estimates that a channel 200 ft. wide and 14 ft. deep would cost about $250,000, and if one 100 ft. wide and of the same depth were decided on it could be made for $150,000. It is proposed to build a deep-water channel from the mouth of the Atchafalaya River to the Gulf.

FIRE EQUIPMENT.—Little Rock, Ark.—Bids are asked by the Board of Public Affairs of the city of Little Rock until Jan. 15, for furnishing the city one second-size fire steamer, one combination chemical engine and hose wagon, equipped with one 35-gallon cylinder, with by-pass connection, ladders, lanterns, axes, etc. Also for equipping present apparatus in service each with one 35-gallon chemical cylinder. Also for furnishing the city 2,000 ft. of rubber-lined cotton-jacketed fire hose. Herbert Du Val is Clerk.

VIADUCT ELEVATOR PLANT.—Kansas City, Mo.—The Kansas City Viaduct & Terminal Railway Co. is arranging for the installation of elevators to lift teams from the level of the street to the level of the viaduct. Viaduct platforms are 11 ft. wide and 33 ft. long, and have 16 ft. clear headroom; enclosed on all sides and equipped with automatic doors at the landings; the elevator is started by a push-button and stops automatically, and the stopping opens the doors. It is proposed to install two such plants, one to contain eight elevators.

CANAL.—Pittsfield, Ill.—Bids were received on Dec. 20 by the Board of Commissioners of the Sny Island Levee Drainage District, for constructing a drainage canal in the Bay Creek Sub-district to consist of clearing the right-of-way, excavating a channel (mostly solid work) and constructing levees. Total amount of excavation required about 300,000 cu. yds. Web. P. Bushnell is Ch. Engr., Quincy. A. J. Thomas is Secy. of Dist., Pleasant Hill. Contract has been let to A. V. WILLS & SONS at 7.95 cts. a cu. yd. Canal is less than six miles long in alluvial soil and almost solid excavation.

PROJECTILES.—Washington, D. C.—The Bureau of Ordnance, Navy Dept., Washington, has awarded to the FIRTH-STERLING STEEL CO., Giesboro Point, D. C., contract for furnishing projectiles as follows: 1,000 6-in. armor piercing shells, $25 each; 1,000 7-in. same, $45 each; 1,000 8-in. same, $62.50 each; 1,000 12-in. same, $190 each; 5,000 6-in. target shells, $10.45 each; 1,000 7-in. same

$15.45 each; 2,000 8-in. same, $20.90 each; 1,000 12-in. same, $57.00 each; and to the AMERICAN AND BRITISH MFG. CO., Bridgeport, Conn., contract for 2,000 5-in. 60-lb. target shells, at $6.62 each. The Navy Department contracts now in the hands of the Firth-Sterling Steel Co. for projectiles aggregate about $1,000,000, and have all been awarded within the past few months.

SEA WALL.—New York, N. Y.—The following bids were opened on Dec. 28 by the Department of Docks, for furnishing material and building concrete sea wall and platform on piles at east side of North Brother Island, East River: (a) 5,000 cu. yds. rip-rap, per cu. yd.; (b) sea wall and platform, (c) totals. Daniel F. Toomey, (a) 55 cts., (b) $60,000. (c) $62,750. Lawler Bros., 17 Milk St., Boston, Mass., (a) $1.10, (b) $58,000, (c) $58,500. Russell Construction Co., (a) $1.05, (b) $52,725, (c) $57,975. SNARE & TRIEST CO., 143 Liberty St., (a) $1, (b) $48,870, (c) $53,870 (awarded contract). New England Construction Co., (a) $1.04, (b) $55,953, (c) $61,353. Cooper & Evans Co., (a) $1.24, (b) $63,000, (c) $69,200. Leslie McHarg & Co., (a) $1, (b) $51,779, (c) $56,779. Bernard Rolf, (a) 65 cts., (b) $55,333, (c) $58,583. Phoenix Construction Co., (a) $1, (b) $62,897, (c) $67,-89.

CONTRACT PRICES.

BARGE CANAL WORK.—Albany, N. Y.—The names of bidders and itemized prices of bids received by N. V. V. Franchot, Supt. of Public Works, on Dec. 19, for Barge Canal Contract No. 17, Erie Canal, Section 3, being for the construction of the following structures on the Mohawk River: Dam 7, Lock 11, at Amsterdam Sta. 2201 + 46; Dam 8, Lock 12, at Tribes Hill, Sta. 2443 + 17; and incidental work appertaining thereto, length of contract being 0.4 of a mile, are as follows: (1) Engineer's estimate; (2) The SCOFIELD CO., Pennsylvania Bldg., Philadelphia, Pa.; (3) The John Pierce Co., 277 Broadway, New York. The details of Contracts No. 16 and No. 18 were given in last week's issue.

BIDS RECEIVED FOR CONTRACT 17, BARGE CANAL, ALBANY, N. Y., ON DEC. 19.

	(1)	(2)	(3)
Clearing	$250.00	$250.00	$250.00
185,000 cu. yds. all excavation	.80	.98	.94
150 lin. ft. drilling bolt holes in rock	1.00	1.00	1.00
60 M. B. M. sheeting and bracing	40.00	40.00	45.00
33,000 cu. yds. forming embankment	.15	.12	.15
225 cu. yds. puddle	2.00	1.50	2.00
75 M. B. M. yellow pine or Douglas fir, sawed lumber	50.00	50.00	60.00
3 M. B. M. white oak sawed lumber	100.00	100.00	100.00
360 foundation piles, 15 ft. long, each	6.75	5.50	6.75
1,100 foundation piles, 16 ft. long, each	7.00	5.75	7.00
500 foundation piles, 20 ft. long	8.00	6.25	8.00
75 M. B. M. wooden sheet piling	55.00	50.00	65.00
700 sq. ft. steel sheet piling	1.00	1.00	1.00
48,000 cu. yds. second class concrete	7.50	6.50	8.25
1,800 cu. yds. third class concrete	6.25	6.30	7.50
1,500 cu. yds. grouted filling	2.50	2.25	2.50
7,000 cu. yds. wash wall	1.50	1.50	1.50
700 cu. yds. ballast	1.50	1.50	1.50
400 sq. yds. second class stone paving	2.00	2.00	2.00
4,200 cu. yds. hand-laid rip-rap	3.00	2.75	3.00
4,300 cu. yds. rip-rap, first class	3.00	2.75	3.00
5,300 cu. yds. rip-rap, second class	3.00	2.75	3.00
4,200 cu. yds. rip-rap, fourth class	2.00	1.75	2.00
25,000 lbs. iron castings	.035	.037	.035
2,522,000 lbs. structural steel	.045	.0395	.05⅝
172,000 lbs. metal reinforcement	.04	.033	.04
70 cast iron idlers, "A," including pins, each	4.00	3.40	4.00
8 cast iron idlers, "B," including pins, each	1.00	.78	1.00
19 pairs uprights for Dam 7 (including bracing), per pair	1,000.00	1,416.00	1,000.00
16 pairs uprights for Dam 8 (including bracing), per pair	700.00	1,044.00	700.00
19 gates "A," "Ax" and "Ay" for dams, each	1,300.00	1,128.00	1,300.00
17 gates "B" for dams, each	550.00	426.00	550.00
2 gates "C" for dams, each	370.00	288.00	370.00
4 gates "D" for dams, each	200.00	162.00	200.00
16 gates "F," "Fx" and "Fy" for dams, each	900.00	780.00	900.00
14 gates "G" for dams, each	390.00	318.00	390.00
2 gates "H" for dams, each	260.00	204.00	260.00
38 shoes for uprights for Dam 7 (including anchorages therefor), each	62.00	53.00	62.00
32 shoes for uprights for Dam 8 (including anchorages therefor), each	46.00	40.00	46.00
122,000 lbs. wrought iron chains, per lb.	.06	.072	.06
4 upper lock gates, complete with anchorages, each	3,000.00	2,760.00	3,000.00
4 lower lock gates, complete with anchorages, each	3,900.00	3,480.00	3,900.00
4 needle dams, complete with anchorages and needles, each	2,800.00	2,280.00	2,800.00
8 supports for valve seats, each	165.00	148.00	165.00
8 lock valves, with seats, tracks and guides, each	700.00	776.00	700.00
3,000 lin. ft. 2-line wrought iron pipe railing, per lin. ft.	1.00	1.08	1.00
Total	$883,926	$846,793	$971,943

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

DERRICK.—Olongapo, P. I.—The Bureau of Yards and Docks, Navy Dept., Washington, has awarded to the PITTSBURG INDUSTRIAL IRON WORKS, Westinghouse Bldg., Pittsburg, Pa., contract for furnishing one 20-ton steel derrick at the Coaling Station, Olongapo, P. I., at their bid of $3,016. Bids were opened Dec. 22.

BOILERS.—Panama.—Bids were opened Jan. 2 at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for four Scotch marine boilers, 11 ft. 6-in. outside diameter, 8 ft. 10 in. long, for a working pressure of 125 lbs. to the sq. in. Bids were as follows: P. Delany & Co., Newburgh, N. Y., $19,000; no time stated. Fox Bros. & Co., New York, $16,088; 100 days. A. D. Granger Co., New York, $18,792; no time stated. MANNING, MAXWELL & MOORE, New York, awarded contract at $15,900; 150 to 180 days. Moran Co., Seattle, Wash., $24,650; 180 to 210 days; La Boca delivery.

ENGINEERING SUPPLIES.—Panama.—Requisitions from Panama have been received at the Isthmian Canal Commission, Washington, D. C., for a large quantity of lumber and engineering supplies, of which the following items are the most interesting: 600,000 ft. B. M., 1 × 6-in. drop siding, and the same quantity and size of flooring; 1,200,000 ft. B. M., S. 4. S.; 800,000 ft. B. M., S. 1 S. 1 E.; 200,000 ft. B. M., S. 1 S., of various sizes and lengths; 150,000 fire brick; 24,000 ft. standard cast-iron soil pipe, 2- and 4-in., with necessary fittings.

ENGINEERING SUPPLIES.—Panama.—Bids are asked until 10:30 a. m., Jan. 18, under Circular 347, at the office of David Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., for a quantity of engineering supplies, as follows: Two single-trolley electric cranes, 20-ton, three motor type, and one single-trolley electric crane, ten-ton, three motor type; two 50-HP. and three 30-HP. induction motors; four 75-KW. transformers; 18 air brake switches; 7,500 ft. coil chain, straight link; 100,000 yds. wire screening; 2,600,000 ft. B. M., lumber, various sizes; 77 draft mules; 20,000 gals. kerosene; and a quantity of steel plates, angle bars, steel roofing, roofing tin, ingot tin, nails, rivets, chain, car springs and turnbuckles, boiler tubes, lead washers, hydraulic jacks, grease cups, hose, window glass, etc.

ELECTRIC-LIGHT PLANT.—Panama.—Bids are asked until 10:30 a. m., Jan. 18, at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Commission, Washington, D. C., under Circular 347, for engine, generator and other material for doubling the capacity of the Culebra-Empire electric-light plant. The engine is to be one non-condensing 350 I.HP., engine with one engine type revolving field generator, 200-KW. The remaining material called for is one five-panel switchboard, one one-panel constant-current transformer switchboard, two Thomson primary round pattern, three-phase, 60-cycle, 2,200-volt recording wattmeters of 50-ampere capacity, one similar wattmeter of 100-ampere capacity, 50 constant-current open-base inclosing globe series, arc lamps with the necessary globes and carbons, 80 transformers and 24 lightning arresters.

MEXICO.

The names of parties awarded contracts are printed in capital letters.

ELECTRIC TRAMWAY.—Lerdo-Torreon, Coahuila.—The electric tramway lines of the Lerdo-Torreon Co. are to be extended in the near future.

MIRROR FACTORY.—Chihuahua, Chih.—F. Knudsen and C. H. Snyder, residents of the City of Chihuahua, have obtained from the State Government a concession for the establishment of a mirror factory in the city. It is expected the factory will be in operation within six months.

IRRIGATION WORKS.—Villa Juares, Nuevo Leon.—Miguel Morales will soon begin very extensive and important hydraulic works for irrigation at Villa Juarez, in the State of Nuevo Leon. It is his intention to use the waters of the Cieneguita Creek, which crosses the Cruz ranch, the property which Mr. Morales proposes to irrigate.

WATER SUPPLY.—Victoria, Tamaulipas.—Carlos Garza Cortina, attorney for Zeferino Romero, has applied to the Federal Government for authority to use additional water from the Guayalejo River for irrigation purposes. The irrigation system which he now has in operation will be considerably enlarged if the application is granted by the Government.

WATER POWER AND IRRIGATION WORKS.—Colima.—Marcelo Valentin, a French resident of Mexico City, has applied to the Department of Fomento for a concession authorizing him to use the waters of the Tuxpan River, in the State of Colima, for irrigation and power purposes. It is proposed to distribute water for irrigation to the farms along the river by proper works.

RAILWAY.—Jarita-Colombia, Chihuahua.—The National Ry. Co. has been granted a concession to construct and exploit, for a term of 99 years, a branch line from Jarita, a station 31 kilometers south of Laredo, to the town of Colombia, in the state of Chihuahua. The line will be about 20 miles long, and surveys must commence within one month, and the road completed within two years.

WATER-WORKS DAM.—Chihuahua, Chih.—W. A. BIRD, the contractor to whom was awarded the construction of the new dam on the Chuviscar River, from which the city of Chihuahua is to get an increased supply of water, has commenced work, and expects to finish the construction within ten months. The dam will be 900 ft. long, 50 ft. high, and will impound about 260,000,000 cu. ft. of water.

CEMENT STONE AND PIPE FACTORY.—Monterey.—The Dallas Cement Stone & Pipe Mfg. Co., of Dallas, Tex., has been investigating the situation here with the view of establishing a branch factory in Monterey. P. S. Silber, representing the company, says that he will examine into the opportunities offered for the proposed industry in the other principal cities of Mexico, and will locate the factory wherever is considered the best place.

WATER POWER.—Jalapa, Veracruz.—The firm of S. Pearson & Son has been granted a concession by the federal government to erect the works necessary to utilize, for motive power, 340,000 liters of water per second from the Antigua River, in the canton of Jalapa, state of Veracruz. Surveys must commence within six months, and the construction within 24 months, and the works be completed within seven years from Dec. 12 last, the date of the concession. John B. Body, Puente de Alvarado No. 15, City of Mexico, is representative of Pearson & Son.

RAILWAY.—Sonora.—A concession has been granted A. H. McKay, representing the Cananea, Rio Yaqui & Pacific Ry. Co., for the construction of a railway from some point on the Naco and Cananea Railway to the station of Ymuris, on the Sonora Railway. The concession calls for the completion of the road in 18 months from the date of the concession. The company has the exclusive right for ten years to the railway transportation of the territory in which the road is built, for 33 kilometers on each side of the line, provided the road is built within the specified time.

HYDRO-ELECTRIC PLANT.—Chihuahua.—B. H. Mahoney, the promoter of the enterprise to establish at La Joya, on the Conchos River, state of Chihuahua, a large hydro-electric plant, to supply power to the city of Chihuahua, Parral, and intermediate points, states that a company called The Conchos River Power Co. has been incorporated under the laws of the state of New Jersey, with a capital of $1,500,000, with main offices in New York, to carry out the enterprise. The concession was originally obtained by R. M. Burke, formerly United States Consul at Chihuahua, and now vice-president of the company.

ELECTRIC TRAMWAYS.—Chihuahua, Chih.—It has been definitely decided that the Compania Tranvia Company of Chihuahua will electrify its system at once, and prices are now being obtained on all material to be used in construction. The concession for the construction of the system is in the name of A. C. Nash, as Gen. Mgr. of the present company, and provides for the construction and maintenance of electric railways on any streets and public highways and across any private lands or roadways within the city of Chihuahua, and on all roads and streets to and from and within all other municipalities in the district of Iturbide.

RAILWAY BRIDGE.—Matamoras, Tamaulipas.—B. F. Yoakum, Chn. of the Executive Boards of the Rock Island and Frisco systems, and Pres. of the St. Louis, Brownsville & Mexico Ry., has approved the site for the proposed bridge across the Rio Grande between Matamoras and Brownsville, to connect the St. Louis, Brownsville & Mexico line with the National Railway of Mexico. The site for the bridge has already been approved by the National Co. It is understood the bridge will be built and used jointly by the two roads. The action of the National Co., so far as the Mexican side of the river is concerned, has been approved by the Department of Public Communications.

DAM.—Chihuahua, Chih.—The contract for large dam to be erected for the Chihuahua water-works has been awarded to W. A. BIRD, City of Chihuahua. Mr. Bird's bid was $316,000, but with the extra work which goes with the contract the amount to be expended will be about $500,000. Work is to be started at once, and pushed to conclusion as rapidly as possible. The latest labor saving machinery will be installed. Steam traveling cranes will be used to handle all the material at the dam, and a double track gravity tram will be built from the quarry to the works. An air compressor, three air drills and a channelling machine are to be installed at once, as well as steam concrete and mortar mixers. In the spring, when the nights become warmer, an electric light plant will be employed, and night shifts put on.

WATER METERS.—Parral, Chih.—Bids are asked until Feb. 28 by the Junta de Mejoras Materiales of Hidalgo del Parral, State of Chihuahua, for 300 water meters for the first installations that the city is about to make, and request manufacturers to send samples of their products accompanied by bids for that number. The following will be the requirements: The water meter which is sent as sample must be well packed and addressed to Junta de Majoras Materiales, Hidalgo del Parral, Chihuahua, Mexico. Under separate cover will be sent to the Junta, directions for using it, together with the price on the basis of 300, and the price of each of the pieces of which it is composed in case those supplies will be needed. The diameter of the pipe will be of ½-in. to ¾-in., and will be strong enough to resist a minimum pressure of 50 lbs. Rodolfo Valles, Pres.

RAILWAY.—Guadalajara, Jal., to Tepic.—The maps of the proposed Southern Pacific extension between Guadalajara and Tepic have been submitted to Camilio E. Pani, the Government Inspecting Engineer, for his examination and approval. The extension will be built via Tequesquite and Tequila, and will pass through Los Pueblitos, El Saltito, Santa Cruz, Arenal, Amatitan, Tequila, Magdalena, Quemada, Zapote and Tequesquite. It will touch at Arroyo de la Cañada, Arroyo de las Chivas and San José de Gracia; pass a short distance north of Ixtlan and Mexpa, skirt the foot of the extinct volcano of Ceboruco, and pass through Ahuacatlan. Northwest of Ahuacatlan the line will skirt the Fraile Mountain, touch at Temamachaca, cross the range of the Sierra Madre, and pass through Compostela, Miravalles, Trigonal, San Bartolo, Platanar and San Cayetano to the City of Tepic. Epes Randolph, Pres. of the Federal Engineering & Construction Co., San Juan de Letran, No. 3, City of Mexico, is the representative of the Southern Pacific Ry. Co. in Mexico.

TELEPHONE LINES.—Veracruz.—Manuel S. de Corbera and J. Sitzenstatter, both residents of Mexico City, have secured a 50-year concession from the State of Veracruz for a network of telephone lines throughout the State, both for wire and wireless systems. The concession covers the wireless system in the hope that before its expiration that system may have been so perfected as to be used commercially. The concession calls for construction work to commence within 18 months, but Mr. Corbera states that the work of laying an underground system in the City of Veracruz will begin at once, in order that the ducts may be laid before asphalt paving is commenced. After that work is completed the company which is being organized to take over the concession held by Messrs. Corbera and Sitzenstatter, who are now doing the primary work personally, will construct an underground system in the City of Jalapa, and it is expected that the cities of Veracruz and Jalapa will be connected by long distance telephone lines before the end of 1907. Following the completion of the work in Jalapa, Cordoba and Orizaba will be wired, and according to the terms of the concession this work must be completed within four and a half years. Then it is planned to network the State with telephone lines. Arrangements are being made for the use of the automatic system, such as is used in Chicago and Berlin.

For other Proposal Advertisements see pages 51, 52, 53, 54, of Advertisements and Construction News page 16.

STREET IMPROVEMENT.

Bogota, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Bogota, Bergen County, N. J., for macadamizing, laying curb and gutter and flag walks on South Street, Park Place, Homestead Place, Grove Street, Larch Avenue and Elm Avenue on Tuesday, February 12, 1907, at 8 P. M., at the Council Rooms, Maple Street, Bogota.

The approximate quantities are:

Flag walks, 10,500 lineal feet.

Curb, 10,500 lineal feet.

Gutters, 1,950 square yards.

Macadam, 9,200 square yards.

Plans and specifications can be seen and blank forms of proposals obtained at the office of Lemuel Lozier, Engineer, Bank Building, Main and Mercer Streets, Hackensack, N. J.

All bids shall be accompanied by a certified check to the order of the Mayor and Council of the Borough of Bogota for two hundred ($200) dollars.

The Mayor and Council reserves the right to reject any or all bids.

PETER F. HOPPER,
2-3t Chairman Street Committee.

MACADAM ROADS.

Somerville, N. J.

The Board of Chosen Freeholders of Somerset County, New Jersey, will receive sealed bids at the Court House in Somerville on Tuesday, February 5, 1907, at ten o'clock A. M., for Macadamizing 3 14-100 Miles of Road in Branchburgh Township, leading from

the North Branch Iron Bridge westerly to the Hunterdon Co. line, and a spur from North Branch to C. R. R. station.

Each bid must be accompanied with a certified check for $1,000, payable to the order of Henry W. Baird, Director. The maps, profiles and specifications can be seen at the office of the State Commissioner of Public Roads, State House, Trenton, N. J., and at the office of Joshua Doughty, County Engineer, Somerville, N. J.

The right is reserved to reject any or all bids if deemed to the interest of the County or State.

By order of the Board.

HENRY W. BAIRD,
Director.

Somerville, N. J., January 8, 1907. 2-3t

BRIDGE.

Cullman, Ala.

Sealed proposals for the construction of a Steel Bridge over Eight Mile Creek, on the Cullman and Joppa road, will be received until 12 o'clock noon, February 14th, 1907, by the Court of County Commissioners and then publicly opened and let. Specifications, plans and proposal blanks on file in this office. The right to reject any or all bids is expressly reserved. 2-1t

SEWER.

Orangeburg, S. C.

Sealed proposals, endorsed "Proposals for Sewerage," for the construction of a system of Sewerage for the City of Orangeburg, S. C., will be received by the Board of Sewerage Commissioners of said city, until 12 o'clock M. of the twenty-third day of January, 1907.

Plans and profiles may be seen at the office of the City Engineer, and Specifications, Contracts and other forms may be secured from the secretary of the Board of Sewerage Commissioners or at the office of the City Engineer, Orangeburg, S. C., on and after December twenty-sixth, 1906.

A certified check in the sum of one thousand ($1,000.00) dollars must accompany each bid as a guarantee of good faith on the part of the bidder, made payable to L. H. Wannamaker, City Treasurer.

The Board of Sewerage Commissioners reserve the right to reject any and all bids.

THOS. C. DOYLE, Chairman.
L. H. WANNAMAKER, Secretary.
EDWARD HAWES, JR., City Engineer.
December 17, 1906. 2-2t

CONCRETE WORK AND EXCAVATING

About 1,500 yards of reinforced concrete work and about 400 yards of excavation, at Cleveland, Ohio.

GRAVES & STEPHENS,
2-1t Cleveland, Ohio.

Situations Wanted

Civil Engineers.

CIVIL ENGINEER, University graduate, 15 years' practical experience in U. S. and abroad as DESIGNING ENGINEER and GENERAL SUPERINTENDENT, for reinforced concrete, fireproofings and structural steel, desires change. At present employed. Least salary considered, $250 per month. Detailed statement of experience furnished prospective employers. Address "R. 1," Engineering News, New York. 2-2t

TECHNICAL GRADUATE, age 24, 2½ years experience as draftsman and instrumentman municipal work and railroad construction, desires position with contractor or railroad construction or location. West or Southwest preferred. 4916 Portland Ave., Cleveland. 2-2t

CIVIL ENGINEER engaged in vicinity of New York City. Surveys, estimates, computations, construction; desires change. Experience and first-class references. Address "G. B. 2," Engineering News, New York. 2-3t

Surveyors.

WANTED—POSITION by young man (21), as transitman and leveller; 3 years field experience; best of references furnished. Address "Z. B. 2," Engineering News, New York. 2-1t

WANTED—With one year's experience as rodman, running of instrument, etc., and with good education; I desire to change for similar position on construction work where opportunity for advancement is good. Address "C. B. 2," Engineering News, New York. 2-2t

TRANSITMAN—Six years' experience in city surveying, location, construction of piers, bulkheads and general pile driving; able to take charge of party; desires change. Address "F. B. 2," Engineering News, New York. 2-1t

RODMAN or chainman, with experience in surveying, concrete construction and office work, desires position as assistant to civil engineer; references furnished. Address "E. B. 2," Engineering News, New York. 2-1t

Draftsmen.

DRAFTSMAN—Technical graduate, desires position with architect or engineer. Can figure and design girders. Would be willing to work for three months without salary to gain experience. S. V. LEBOWITZ, 8795 21st Ave., Brooklyn, N. Y. 2-1t

STRUCTURAL DRAFTSMAN for buildings and bridges, with long experience; graduate civil engineer; wants engagement. Address "B. B. 2," Engineering News, New York. 2-3t

Superintendents, Misc., etc.

FOREMAN railway and general contracting, desires work; California or Alaska. Address "D. B. 2," Engineering News, New York. 2-3t

YOUNG CIVIL ENGINEER wants situation. Experienced in heavy concrete construction; also in surveying. Address "H. B. 2," Engineering News, New York. 2-1t

TECHNICAL GRADUATE with some knowledge of reinforced concrete, and four years' experience, mostly structural steel design, desires outside work; construction work preferred. Address "K. B. 2," Engineering News, New York. 2-2t

REINFORCED CONCRETE SUPERINTENDENT; at liberty Jan. 15; thoroughly practical and competent; specialized in reinforced concrete for eight years; best results shown. Address "L. B. 2," Engineering News, New York. 2-1t

A THOROUGHLY COMPETENT man is open for position as general superintendent of bridge and structural shops; has had wide experience. Address "M. B. 2," Engineering News, New York. 2-1t

CONSTRUCTION SUPERINTENDENT C. E. Wide experience in hydraulic work, railroads, masonry, concrete, mine examination and reporting; several years' experience in Mexico and Orient; speaks Spanish; first-class record and references. Will go anywhere. Address "O. B. 2," Engineering News, New York. 2-3t

BUILDING SUPERINTENDENT open for engagement; is an architect and engineer, and at present engaged as superintendent for a large construction company in New York City. Address "I. B. 2," Engineering News, New York. 2-1t

SITUATIONS OPEN

WANTED—Structural draftsmen to make shop details of steel building construction. Give age, experience and salary. WEISKOPF & STERN, 68 William St., N. Y. 2-3t

WANTED—A draftsman to take care of the field books of a water company and be capable, at the same time, to superintend outside work. Permanent position. Address, giving references, "WATER COMPANY," P. O. Box 910, New York. 2-1t

WANTED—Young technical graduate in civil engineering. Address "Z. 2," Engineering News, New York. 2-1t

WANTED—Instructors in mechanical and electrical engineering. Technical graduate with some years' experience. Address "X. 2," Engineering News, New York. 2-3t

WANTED—Two tracers for structural ornamental iron work. Opportunity to obtain best grade of experience. State age, experience, references and salary desired. College graduates preferred. Address "P. B. 2," Engineering News, New York. 2-1t

WANTED—A man with capital and experience to take management of quarry and crusher plant located near a growing city with good demand for product. Will sell controlling interest or entire plant. Address "A. B. 2," Engineering News, New York. 2-1t

WANTED—Draftsmen, by large N. Y. City firm; start $12.00 week; good prospects; state age, experience and references. Address "S. B. 2," Engineering News, New Yor. 2-2t

WANTED—Civil engineers, by large N. Y. City firm; start $18.00 week; good prospect; state age, experience and references. Address "W. B. 2," Engineering News, New York. 2-2t

DRAFTSMAN—Familiar with mill and structural work. Address letter, giving education, experience and salary wanted, to BOX 31, Ridgway, Pa. 2-2t

WANTED—A draftsman—gas works apparatus and plants—by a contracting firm in Indiana; technical graduate of several years 'shop or gas works experience preferred. Address "X. C. 2," Engineering News, New York. 2-3t

Miscellaneous Wants

CIVIL ENGINEER desires to interest himself with engineering firm or contractors, where he can earn $150 per month salary; 22 years' experience, railroad and waterworks; would invest $5,000 on good proposition. Address "S. 26," Engineering News, New York. 2-2t

WANTED—By a young man, C. E., instruction evenings in designing and calculation of reinforced concrete. Address "E. 2," Engineering News, New York. 2-1t

WANTED—10 or 15 horse-power motor, 500 volt. Address "D. A. 2," Engineering News, New York. 2-1t

WANTED—A pump in good order, capable of furnishing 100 to 140 gallons per minute against a pressure of 100 pounds. Address "C. A. 2," Engineering News, New York. 2-1t

PARTY with good offices in good location, would represent some manufacturing company with some specialty in the way of special machines or iron work, either to buy the goods outright or act for them. Address "W. A. 2," Engineering News, New York. 2-1t

Manufacturer's Agent

CIVIL ENGINEER—Manager for five years of branch office of well-known firm of engineers, desires to contract with manufacturer whose product is used in construction or building work, as a Sales Agent in territory about Philadelphia. Address "X. B. 2," Engineering News, New York. 2-1t

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HENRY MacNAIR, Cons. Eng. & Geographer
No. 509 Marine Bank,
1-2t Buffalo, New York.

WANTED

HOISTING ENGINE

with double drum, must be in good condition.

FEENEY & SHEEHAN,
2-2t Albany, N. Y.

WANTED

Stiff Leg Derrick

five-ton capacity; hand power and 20-foot boom.

ATLANTIC CONSTRUCTION & SUPPLY CO.
2-3t Atlantic City, N. J.

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Second-hand Electric Traveling Crane

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All in excellent condition. Address, giving cash offer for one or all of above, "G. 2," Engineering News, New York. 2-1t

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